

STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/758,417A
FILING DATE: 02-Dec-1996
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996
APPLICATION NUMBER: US 08/544,404
FILING DATE: 10-OCT-1995
APPLICATION NUMBER: US 08/352,322
FILING DATE: 07-DEC-1994
APPLICATION NUMBER: US 08/209,741
FILING DATE: 09-MAR-1994
APPLICATION NUMBER: US 08/165,699
FILING DATE: 10-DEC-1993
APPLICATION NUMBER: US 08/161,739
FILING DATE: 03-DEC-1993
APPLICATION NUMBER: US 08/155,301
FILING DATE: 18-NOV-1993
APPLICATION NUMBER: US 08/096,762
FILING DATE: 22-JUL-1993
APPLICATION NUMBER: US 08/053,131
FILING DATE: 26-APR-1993
APPLICATION NUMBER: US 07/990,860
FILING DATE: 16-DEC-1992

ATTORNEY/AGENT INFORMATION:

NAME: Serafini, Andrew T.
REGISTRATION NUMBER: 41,303
REFERENCE/DOCKET NUMBER: 014543-009030US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 208:

SEQUENCE CHARACTERISTICS:

LENGTH: 439 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: DNA

SEQUENCE DESCRIPTION: SEQ ID NO: 208:

US-08-758-417A-208

Query Match 100.0%; Score 439; DB 3; Length 439;
Best Local Similarity 100.0%; Pred. No. 1.1e-133;
Matches 439; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60

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Db      1  |||||ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
Qy      61  AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
Db      61  |||||AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
Qy      121  GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
Db      121  |||||GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
Qy      181  AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
Db      181  |||||AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
Qy      241  CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
Db      241  |||||CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
Qy      301  CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
Db      301  |||||CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
Qy      361  GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
Db      361  |||||GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
Qy      421  CCGCCATCTGATGAAGCTT 439
Db      421  |||||CCGCCATCTGATGAAGCTT 439

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RESULT 3

US-09-042-353-393

; Sequence 393, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/810,279
; FILING DATE: 17-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,408
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/904,068
; FILING DATE: 23-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; PRIOR APPLICATION DATA:
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; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
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; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 393:

; SEQUENCE CHARACTERISTICS:
; LENGTH: 3819 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-393

Query Match 86.1%; Score 377.8; DB 3; Length 3819;
Best Local Similarity 92.5%; Pred. No. 3e-113;
Matches 397; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      6 CATGGAGTTCCTCGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
      |||| | |||| | |||| || |||| |||| |||| |||| ||||
Db    2445 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTGCCAGATG 2504

Qy     66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2505 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 2564

Qy    126 CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2565 CATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAACC 2624

Qy    186 AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
      || |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2625 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC 2684

Qy    246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2685 AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 2744

Qy    306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATCATAGTTACCCGTACACTTTTGGCCA 365
      |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2745 TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGGTCA 2804

Qy    366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
      ||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
Db    2805 GGGAAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 2864

Qy    426 ATCTGATGA 434
      |||| ||||
Db    2865 ATCTGATGA 2873
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RESULT 4

US-08-758-417A-243

; Sequence 243, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834

COMPUTER READABLE FORM:

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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/758,417A
FILING DATE: 02-Dec-1996
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996
APPLICATION NUMBER: US 08/544,404
FILING DATE: 10-OCT-1995
APPLICATION NUMBER: US 08/352,322
FILING DATE: 07-DEC-1994
APPLICATION NUMBER: US 08/209,741
FILING DATE: 09-MAR-1994
APPLICATION NUMBER: US 08/165,699
FILING DATE: 10-DEC-1993
APPLICATION NUMBER: US 08/161,739
FILING DATE: 03-DEC-1993
APPLICATION NUMBER: US 08/155,301
FILING DATE: 18-NOV-1993
APPLICATION NUMBER: US 08/096,762
FILING DATE: 22-JUL-1993
APPLICATION NUMBER: US 08/053,131
FILING DATE: 26-APR-1993
APPLICATION NUMBER: US 07/990,860
FILING DATE: 16-DEC-1992

ATTORNEY/AGENT INFORMATION:

NAME: Serafini, Andrew T.
REGISTRATION NUMBER: 41,303
REFERENCE/DOCKET NUMBER: 014643-009030US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 243:

SEQUENCE CHARACTERISTICS:

LENGTH: 3819 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: DNA

SEQUENCE DESCRIPTION: SEQ ID NO: 243:

US-08-758-417A-243

Query Match 86.1%; Score 377.8; DB 3; Length 3819;
Best Local Similarity 92.5%; Pred. No. 3e-113;
Matches 397; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65

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Db      2445 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG 2504
Qy      66  TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
Db      2505 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 2564
Qy      126 CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
Db      2565 CATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAACC 2624
Qy      186 AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
Db      2625 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC 2684
Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
Db      2685 AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 2744
Qy      306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
Db      2745 TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA 2804
Qy      366 GGGGACCAAGCTGGAGATCAAACGAACGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
Db      2805 GGAACCAAGCTGGAGATCAAACGAACGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 2864
Qy      426 ATCTGATGA 434
Db      2865 ATCTGATGA 2873

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RESULT 5

US-09-472-087-62

; Sequence 62, Application US/09472087

; Patent No. 6682736

; GENERAL INFORMATION:

; APPLICANT: HANSON, DOUGLAS C.

; APPLICANT: NEVEU, MARK J.

; APPLICANT: MUELLER, EILLEN E.

; APPLICANT: HANKE, JEFFREY H.

; APPLICANT: GILMAN, STEVEN C.

; APPLICANT: DAVIS, C. GEOFFREY

; APPLICANT: CORVALAN, JOSE R.

; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODIES TO CTLA-4

; FILE REFERENCE: ABX-PF1

; CURRENT APPLICATION NUMBER: US/09/472,087

; CURRENT FILING DATE: 1999-12-23

; PRIOR APPLICATION NUMBER: 60/113,647

; PRIOR FILING DATE: 1998-12-23

; NUMBER OF SEQ ID NOS: 147

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 62

; LENGTH: 714

; TYPE: DNA

; ORGANISM: Homo sapiens

US-09-472-087-62

Query Match 83.9%; Score 368.4; DB 4; Length 714;
Best Local Similarity 90.6%; Pred. No. 1.7e-110;
Matches 393; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

RESULT 6

Db 393 GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 452

Qy 421 CCGCCATCTGATGA 434

|||||||

Db 453 CCGCCATCTGATGA 466

RESULT 7

US-09-042-353-420

; Sequence 420, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 420:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 420 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-420

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Query Match          81.5%; Score 357.8; DB 3; Length 420;
Best Local Similarity 92.2%; Pred. No. 3.8e-107;
Matches 377; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
      |||| | ||| | ||||| || ||||| ||||| ||||| ||||| |||||
Db     12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG 71

Qy     66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 131

Qy    126 CATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    132 CATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191

Qy    186 AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245

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Db      192 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC 251
Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
Db      252 AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 311
Qy      306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
Db      312 TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA 371
Qy      366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 414
Db      372 GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420

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RESULT 8

US-08-758-417A-220

; Sequence 220, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

```

; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 220:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 420 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 220:
US-08-758-417A-220

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Qy	6	CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG	65
Db	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG	71
Qy	66	TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC	125
Db	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC	131
Qy	126	CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC	185
Db	132	CATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Qy	186	AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC	245
Db	192	AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGTGTCCCATC	251
Qy	246	AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	305
Db	252	AAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Qy	306	TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA	365
Db	312	TGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTTGGTCA	371
Qy	366	GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	414
Db	372	GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	420

US-09-042-353-358

; Sequence 358, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

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; STATE: California

; COUNTRY: USA

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; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

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; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/352,322

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; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 358:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 388 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-358

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Query Match          80.0%; Score 351.2; DB 3; Length 388;
Best Local Similarity 94.1%; Pred. No. 5.3e-105;
Matches 365; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
        |||||  |||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      1 ATGGACATGATGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC 60

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        ||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     61 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 120

Qy    121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db    121 GTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAT 180

Qy    181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db    181 AAACCAGGGAAAGCCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 240

Qy    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300

Qy    301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360

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Db      301  CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTT 360
QY      361  GGCCAGGGGACCAAGCTGGAGATCAAAC 388
Db      361  GGCCAGGGGACCAAGCTGGAGATCAAAC 388

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RESULT 10

US-08-758-417A-206

; Sequence 206, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; ATTORNEY/AGENT INFORMATION:

; NAME: Serafini, Andrew T.

; REGISTRATION NUMBER: 41,303
 ; REFERENCE/DOCKET NUMBER: 014643-009030US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 576-0200
 ; TELEFAX: (415) 576-0300
 ; INFORMATION FOR SEQ ID NO: 206:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 388 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 206:
 US-08-758-417A-206

Query Match 80.0%; Score 351.2; DB 3; Length 388;
 Best Local Similarity 94.1%; Pred. No. 5.3e-105;
 Matches 365; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

Qy	1	ATGGACATGGAGTTCCCCGTTCTGCTGCTCTGTTTCCCAGGTGCC	60
Db	1	ATGGACATGATGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTCCCAGGTTC	60
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	61	AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA	120
Qy	121	GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	121	GTCACCATCACTTGTCTGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAT	180
Qy	181	AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	181	AAACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC	240
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	301	CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTACACTTTT	360
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAAC	388
Db	361	GGCCAGGGGACCAAGCTGGAGATCAAAC	388

RESULT 11

US-09-343-485A-3

; Sequence 3, Application US/09343485A

; Patent No. 6413777

; GENERAL INFORMATION:

; APPLICANT: REFF, MITCHELL R.

; APPLICANT: BARNETT, RICHARD S.

; APPLICANT: MCLACHLAN, KAREN R.

; TITLE OF INVENTION: NOVEL METHOD FOR INTEGRATING GENES AT SPECIFIC SITES IN

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; TITLE OF INVENTION:  MAMMALIAN CELLS VIA HOMOLOGOUS RECOMBINATION AND
; TITLE OF INVENTION:  VECTORS FOR ACCOMPLISHING THE SAME
; FILE REFERENCE:  037003-0275807
; CURRENT APPLICATION NUMBER:  US/09/343,485A
; CURRENT FILING DATE:  1999-06-30
; PRIOR APPLICATION NUMBER:  09/023,715
; PRIOR FILING DATE:  1998-02-13
; PRIOR APPLICATION NUMBER:  08/819,866
; PRIOR FILING DATE:  1997-03-14
; NUMBER OF SEQ ID NOS:  3
; SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH:  19040
;   TYPE:  DNA
;   ORGANISM:  Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION:  Description of Artificial Sequence:  Synthetic DNA
;   OTHER INFORMATION:  referred to as "Mandy"
US-09-343-485A-3

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Qy	1	ATGGACATGGAGTTCCCCGTTCCAGCTCCTGGGGCTCCTGTGCTCTGTTTTCCCAGGTGCC	60
Db	7545	ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTTCTGCTCTGGCTCCCAGGTGCC	7604
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	7605	AGATGTGACATCCAGATGACCCAGTCTCCATCTTCCCTGTCTGCATCTGTAGGGGACAGA	7664
Qy	121	GTCACCATCACTTGTCGGGGCAGTCAAGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	7665	GTCACCATCACTTGTCAGGGCAAGTCAAGACATTAGGTATTATTAAATTGGTATCAGCAG	7724
Qy	181	AAACCAGAGAAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	7725	AAACCAGGAAAAGCTCCTAAGCTCCTGATCTATGTTGCATCCAGTTTGCAAAGTGGGGTC	7784
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	7785	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAGTTCACTCTCACCGTCAGCAGCCTG	7844
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	7845	CAGCCTGAAGATTTTGCGACTTATTACTGTCTACAGGTTTATAGTACCCCTCGGACGTTT	7904
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	7905	GGCCAAGGGACCAAGGTGGAATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTC	7964
Qy	421	CCGCCATCTGATGA	434
Db	7965	CCGCCATCTGATGA	7978

RESULT 12

US-08-488-376-16

; Sequence 16, Application US/08488376

; Patent No. 5811524

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaïma Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF

; NUMBER OF SEQUENCES: 19

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Burns, Doane, Swecker & Mathis

; STREET: P.O. Box 1404

; CITY: Alexandria

; STATE: Virginia

; COUNTRY: United States

; ZIP: 22313-1404

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/488,376

; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-150

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (703) 836-6620

; TELEFAX: (703) 836-2021

; INFORMATION FOR SEQ ID NO: 16:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 705 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..705

US-08-488-376-16

Query Match 76.0%; Score 333.6; DB 1; Length 705;

Best Local Similarity 86.2%; Pred. No. 3.9e-99;

Matches 369; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

Qy 7 ATGGAGTTCCTCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCCAGATGT 66
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Db 1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60
 Qy 67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
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 Db 61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTGGAGACAGAGTCACC 120
 Qy 127 ATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
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 Db 121 ATCACTTGCCGGGCAGGTGAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180
 Qy 187 GAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
 |||||
 Db 181 GGGAAAGCCCCCTAAGTCTCTGATATATGCTGGATCCAATTTGCACCGTGGGGTCCCGTCA 240
 Qy 247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
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 Db 241 AGGTTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTCTGCAACCT 300
 Qy 307 GAAGATTTTGTCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
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 Db 301 GAAGATTTTGTCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTTCGGCCCA 360
 Qy 367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
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 Db 361 GGGACCAAGGTGGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 420
 Qy 427 TCTGATGA 434
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 Db 421 TCTGATGA 428

RESULT 13

US-08-634-223-16

; Sequence 16, Application US/08634223

; Patent No. 5840298

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaïma Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF

; NUMBER OF SEQUENCES: 19

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Burns, Doane, Swecker & Mathis

; STREET: P.O. Box 1404

; CITY: Alexandria

; STATE: Virginia

; COUNTRY: United States

; ZIP: 22313-1404

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

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;   OPERATING SYSTEM:  PC-DOS/MS-DOS
;   SOFTWARE:  PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER:  US/08/634,223
;   FILING DATE:
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:  US/08/488,376
;   FILING DATE:  07-JUN-1995
;   ATTORNEY/AGENT INFORMATION:
;   NAME:  Teskin, Robin L.
;   REGISTRATION NUMBER:  35,030
;   REFERENCE/DOCKET NUMBER:  012712-150
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE:  (703) 836-6620
;   TELEFAX:  (703) 836-2021
;   INFORMATION FOR SEQ ID NO:  16:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH:  705 base pairs
;   TYPE:  nucleic acid
;   STRANDEDNESS:  single
;   TOPOLOGY:  linear
;   MOLECULE TYPE:  DNA (genomic)
;   FEATURE:
;   NAME/KEY:  CDS
;   LOCATION:  1..705
US-08-634-223-16

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Query Match          76.0%;  Score 333.6;  DB 2;  Length 705;
Best Local Similarity 86.2%;  Pred. No. 3.9e-99;
Matches 369;  Conservative 0;  Mismatches 59;  Indels 0;  Gaps 0;

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Qy      7 ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
        ||||||| || | ||||||||||||||||||| |||| | |||||||||||||||
Db      1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60

Qy     67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
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Db     61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTCGGAGACAGAGTCACC 120

Qy    127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
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Db    121 ATCACTTGCCGGGCGAGTCAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180

Qy    187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
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Db    181 GGGAAAGCCCCTAAGCTCCTGATATATGCTGGATCCAATTTGCACCGTGGGGTCCCGTCA 240

Qy    247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
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Db    241 AGGTTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTCTGCAACCT 300

Qy    307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
        |||||||||||||||| || | ||||| | | ||| ||| | ||||| ||||
Db    301 GAAGATTTTGCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTTCGGCCCA 360

Qy    367 GGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426

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; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..705
US-08-634-224-16

Query Match 76.0%; Score 333.6; DB 2; Length 705;
Best Local Similarity 86.2%; Pred. No. 3.9e-99;
Matches 369; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

```
Qy      7 ATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
        ||||| ||| | ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60

Qy     67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTGGAGACAGAGTCACC 120

Qy    127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    121 ATCACTTGCCGGGCAGGTCAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180

Qy    187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
        | ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    181 GGGAAAGCCCCTAAGTCCCTGATATATGCTGGATCCAATTTGCACCGTGGGGTCCCGTCA 240

Qy    247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    241 AGGTTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTCTGCAACCT 300

Qy    307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
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Db    301 GAAGATTTTGCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTCGGCCCA 360

Qy    367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
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Db    361 GGGACCAAGGTGGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 420

Qy    427 TCTGATGA 434
        |||||
Db    421 TCTGATGA 428
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RESULT 15

US-08-634-400-16

; Sequence 16, Application US/08634400

; Patent No. 5939068

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaïma Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF

```

; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Burns, Doane, Swecker & Mathis
; STREET: P.O. Box 1404
; CITY: Alexandria
; STATE: Virginia
; COUNTRY: United States
; ZIP: 22313-1404
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/634,400
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/488,376
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-150
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 836-6620
; TELEFAX: (703) 836-2021
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 705 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..705
US-08-634-400-16

```

```

Query Match          76.0%;  Score 333.6;  DB 2;  Length 705;
Best Local Similarity 86.2%;  Pred. No. 3.9e-99;
Matches 369;  Conservative 0;  Mismatches 59;  Indels 0;  Gaps 0;

```

```

Qy      7 ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
        |||||  |||  ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1 ATGGAGACCCCTGCTCAGCTCCTGGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60

Qy     67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCTCGGAGACAGAGTCACC 120

Qy    127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    121 ATCACTTGCCGGGCGAGTCAGAGGATTGCTAGTTATTTAAATTGGTATCAGCACAAACCA 180

Qy    187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

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Db      181 GGGAAAGCCCCTAAGCTCCTGATATATGCTGGATCCAATTTGCACCGTGGGGTCCCGTCA 240
Qy      247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
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Db      241 AGGTTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTCTGCAACCT 300
Qy      307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      301 GAAGATTTTGCAACTTACTATTGTCAACAGGCTTACAGTACCCCTGGACTTTTCGGCCCA 360
Qy      367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 GGGACCAAGGTGGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 420
Qy      427 TCTGATGA 434
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Db      421 TCTGATGA 428

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Search completed: December 2, 2004, 17:07:47
Job time : 74.118 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 17:01:26 ; Search time 336.578 Seconds
(without alignments)
7166.911 Million cell updates/sec

Title: US-08-728-463B-208
Perfect score: 439
Sequence: 1 ATGGACATGGAGTTCCCGT.....CCCGCCATCTGATGAAGCTT 439

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3694831 seqs, 2747406616 residues

Total number of hits satisfying chosen parameters: 7389662

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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21: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	%		Query				Description
	No.	Score	Match	Length	DB	ID	
	1	389	88.6	463	16	US-10-395-894-24	Sequence 24, Appl
	2	389	88.6	463	17	US-10-695-667-24	Sequence 24, Appl
	3	389	88.6	6082	16	US-10-395-894-10	Sequence 10, Appl
	4	389	88.6	6082	17	US-10-695-667-10	Sequence 10, Appl
	5	385.8	87.9	463	16	US-10-395-894-20	Sequence 20, Appl
	6	385.8	87.9	463	17	US-10-695-667-20	Sequence 20, Appl
	7	385.8	87.9	6082	16	US-10-395-894-9	Sequence 9, Appli
	8	385.8	87.9	6082	17	US-10-695-667-9	Sequence 9, Appli
	9	381.2	86.8	974	9	US-09-859-053-29	Sequence 29, Appl
	10	381.2	86.8	974	17	US-10-625-105-29	Sequence 29, Appl
	11	378.4	86.2	702	17	US-10-684-109-89	Sequence 89, Appl
c	12	378.4	86.2	702	17	US-10-684-109-90	Sequence 90, Appl
	13	378.4	86.2	702	17	US-10-684-109-107	Sequence 107, App
c	14	378.4	86.2	702	17	US-10-684-109-108	Sequence 108, App
	15	376.4	85.7	728	9	US-09-844-684-15	Sequence 15, Appl
	16	376.4	85.7	728	14	US-10-040-244-15	Sequence 15, Appl
	17	376.4	85.7	728	17	US-10-693-629-65	Sequence 65, Appl
	18	376.4	85.7	1106	16	US-10-264-049-121	Sequence 121, App
	19	373.6	85.1	705	15	US-10-292-088-23	Sequence 23, Appl
	20	373.2	85.0	716	9	US-09-844-684-13	Sequence 13, Appl
	21	373.2	85.0	716	14	US-10-040-244-13	Sequence 13, Appl
	22	370.4	84.4	702	17	US-10-684-109-101	Sequence 101, App
c	23	370.4	84.4	702	17	US-10-684-109-102	Sequence 102, App
	24	368.8	84.0	705	15	US-10-292-088-47	Sequence 47, Appl
	25	368.4	83.9	714	14	US-10-153-382-18	Sequence 18, Appl
	26	368.4	83.9	714	18	US-10-612-497-62	Sequence 62, Appl
	27	368.4	83.9	714	18	US-10-776-649-62	Sequence 62, Appl
	28	367.2	83.6	702	17	US-10-684-109-113	Sequence 113, App
c	29	367.2	83.6	702	17	US-10-684-109-114	Sequence 114, App
	30	367.2	83.6	752	17	US-10-684-109-83	Sequence 83, Appl
c	31	367.2	83.6	752	17	US-10-684-109-84	Sequence 84, Appl
	32	365.2	83.2	698	9	US-09-844-684-11	Sequence 11, Appl

	33	365.2	83.2	698	14	US-10-040-244-11	Sequence 11, Appl
	34	365.2	83.2	698	17	US-10-693-629-61	Sequence 61, Appl
	35	365.2	83.2	729	15	US-10-216-484-125	Sequence 125, App
	36	365.2	83.2	729	15	US-10-384-933-125	Sequence 125, App
	37	364	82.9	702	17	US-10-684-109-95	Sequence 95, Appl
c	38	364	82.9	702	17	US-10-684-109-96	Sequence 96, Appl
	39	360.4	82.1	490	10	US-09-918-995-37859	Sequence 37859, A
	40	356.8	81.3	384	15	US-10-389-221-10	Sequence 10, Appl
	41	355.6	81.0	1526	17	US-10-679-620-87	Sequence 87, Appl
	42	355.4	81.0	737	9	US-09-919-344-7	Sequence 7, Appli
	43	354	80.6	514	14	US-10-066-543-2025	Sequence 2025, Ap
c	44	354	80.6	537	14	US-10-066-543-186	Sequence 186, App
	45	353	80.4	928	15	US-10-221-945-5	Sequence 5, Appli

ALIGNMENTS

RESULT 1

US-10-395-394-24

; Sequence 24, Application US/10395894

; Publication No. US20040033229A1

; GENERAL INFORMATION:

; APPLICANT: MADDON, Paul J.

; APPLICANT: DONOVAN, Gerald P.

; APPLICANT: OLSON, William C.

; APPLICANT: SCHSLKE, No. US20040033229Albert

; APPLICANT: GARDNER, Jason

; APPLICANT: MA, Dangshe

; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS

; FILE REFERENCE: P00741.70005.US

; CURRENT APPLICATION NUMBER: US/10/395,894

; CURRENT FILING DATE: 2003-03-24

; PRIOR APPLICATION NUMBER: PCT/US02/33944

; PRIOR FILING DATE: 2002-10-23

; PRIOR APPLICATION NUMBER: US 60/335,215

; PRIOR FILING DATE: 2001-10-23

; PRIOR APPLICATION NUMBER: US 60/362,747

; PRIOR FILING DATE: 2002-03-07

; PRIOR APPLICATION NUMBER: US 60/412,618

; PRIOR FILING DATE: 2002-09-20

; NUMBER OF SEQ ID NOS: 33

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 24

; LENGTH: 463

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Includes BamHI/BglII cloning junction, signal peptide, V region, portion

; OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

US-10-395-894-24

Query Match 88.6%; Score 389; DB 16; Length 463;

Best Local Similarity 94.2%; Pred. No. 8.3e-109;

Matches 404; Conservative 0; Mismatches 25; Indels 0; Gaps 0;


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; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, No. US20040033229Albert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS
; FILE REFERENCE: P00741.70005.US
; CURRENT APPLICATION NUMBER: US/10/395,894
; CURRENT FILING DATE: 2003-03-24
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 10
; LENGTH: 6082
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Plasmid
US-10-395-894-10
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Query Match      88.5%; Score 389; DB 16; Length 6082;
Best Local Similarity 94.2%; Pred. No. 1.4e-108;
Matches 404; Conservative 0; Mismatches 25; Indels 0; Gaps 0;
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Qy      6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
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Db      916 CATGAGGGTCCCTGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 975

Qy      66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| |
Db      976 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 1035

Qy      126 CATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| |
Db      1036 CATCACTTGTCGGGCGAGTCAGGGCATTAGCCATTATTTAGCCTGGTTTCAGCAGAAACC 1095

Qy      186 AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
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Db      1096 AGGGAAAGCCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 1155

Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
      || ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| |
Db      1156 AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTACAGCC 1215

Qy      306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
      ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| | ||||| |
Db      1216 TGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTTCCCGCTCACTTTGGCGG 1275

Qy      366 GGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
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Db 1036 CATCACTTGTCTGGGCGAGTCAGGGCATTAGCCATTATTTAGCCTGGTTTCAGCAGAAACC 1095
 Qy 186 AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
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 Db 1096 AGGGAAAGCCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 1155
 Qy 246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
 || |||||
 Db 1156 AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTACAGCC 1215
 Qy 306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
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 Db 1216 TGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTTCCCGCTCACTTTCCGGCGG 1275
 Qy 366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
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 Db 1276 AGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 1335
 Qy 426 ATCTGATGA 434
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 Db 1336 ATCTGATGA 1344

RESULT 5

US-10-395-894-20

; Sequence 20, Application US/10395894

; Publication No. US20040033229A1

; GENERAL INFORMATION:

; APPLICANT: MADDON, Paul J.

; APPLICANT: DONOVAN, Gerald P.

; APPLICANT: OLSON, William C.

; APPLICANT: SCHSLKE, No. US20040033229Albert

; APPLICANT: GARDNER, Jason

; APPLICANT: MA, Dangshe

; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS

; FILE REFERENCE: P00741.70005.US

; CURRENT APPLICATION NUMBER: US/10/395,894

; CURRENT FILING DATE: 2003-03-24

; PRIOR APPLICATION NUMBER: PCT/US02/33944

; PRIOR FILING DATE: 2002-10-23

; PRIOR APPLICATION NUMBER: US 60/335,215

; PRIOR FILING DATE: 2001-10-23

; PRIOR APPLICATION NUMBER: US 60/362,747

; PRIOR FILING DATE: 2002-03-07

; PRIOR APPLICATION NUMBER: US 60/412,618

; PRIOR FILING DATE: 2002-09-20

; NUMBER OF SEQ ID NOS: 33

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 20

; LENGTH: 463

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Includes BamHI/BglII cloning junction, signal peptide, V region, portion

; OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

US-10-395-894-20

Qy	6	CATGGAGTTCCCGCTTCAGCTCCTGGGGCTCCTGCTGCTCTGTATTCCCAGGTGCCAGATG	65
Db	10	CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTATTTCCAGGTGCCAGATG	69
Qy	66	TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC	125
Db	70	TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC	129
Qy	126	CATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC	185
Db	130	CATCACTTGTCGGGCGAGTCAGGGCATTACCAATTATTTAGCCTGGTTTCAGCAGAAACC	189
Qy	186	AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC	245
Db	190	AGGGAAAGCCCCTAAGTCCCTTATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC	249
Qy	246	AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	305
Db	250	AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	309
Qy	306	TGAAGATTTTGAAC TTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA	365
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Qy	366	GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC	425
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RESULT 6

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; Sequence 20, Application US/10695667
; Publication No. US20040161776A1
; GENERAL INFORMATION:
;   APPLICANT: MADDON, Paul J.
;   APPLICANT: DONOVAN, Gerald P.
;   APPLICANT: OLSON, William C.
;   APPLICANT: SCHSLKE, Norbert
;   APPLICANT: GARDNER, Jason
;   APPLICANT: MA, Dangshe
;   TITLE OF INVENTION: PSMA FORMULATIONS AND USES THEREOF
;   FILE REFERENCE: P0741.70006US00
;   CURRENT APPLICATION NUMBER: US/10/695,667
;   CURRENT FILING DATE: 2003-10-27
;   PRIOR APPLICATION NUMBER: US 10/395,894
;   PRIOR FILING DATE: 2003-03-21
;   PRIOR APPLICATION NUMBER: PCT/US02/33944

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RESULT 7

US-10-395-894-9

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; Sequence 9, Application US/10395894
; Publication No. US20040033229A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, No. US20040033229Albert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS
; FILE REFERENCE: P00741.70005.US
; CURRENT APPLICATION NUMBER: US/10/395,894
; CURRENT FILING DATE: 2003-03-24
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 6082
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Plasmid
US-10-395-894-9
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Query Match          87.9%; Score 385.8; DB 16; Length 6082;
Best Local Similarity 93.7%; Pred. No. 1.4e-107;
Matches 402; Conservative 0; Mismatches 27; Indels 0; Gaps 0;
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Qy      6 CATGGAGTTCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
      |||| | ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      916 CATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 975

Qy      66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      976 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 1035

Qy      126 CATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1036 CATCACTTGTCTGGGCGAGTCAGGGCATTACCAATTATTTAGCCTGGTTTCAGCAGAAACC 1095

Qy      186 AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
      || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1096 AGGGAAAGCCCCTAAGTCCCTTATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 1155

Qy      246 AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
      || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1156 AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 1215
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Qy      306 TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
          |||
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          |||

Qy      366 GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
          |||
Db      1276 AGGGACACGACTGGAGATTAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 1335
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Qy      426 ATCTGATGA 434
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Db      1336 ATCTGATGA 1344

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RESULT 8

US-10-695-667-9

; Sequence 9, Application US/10695667

; Publication No. US20040161776A1

; GENERAL INFORMATION:

; APPLICANT: MADDON, Paul J.

; APPLICANT: DONOVAN, Gerald P.

; APPLICANT: OLSON, William C.

; APPLICANT: SCHSLKE, Norbert

; APPLICANT: GARDNER, Jason

; APPLICANT: MA, Dangshe

; TITLE OF INVENTION: PSMA FORMULATIONS AND USES THEREOF

; FILE REFERENCE: P0741.70006US00

; CURRENT APPLICATION NUMBER: US/10/695,667

; CURRENT FILING DATE: 2003-10-27

; PRIOR APPLICATION NUMBER: US 10/395,894

; PRIOR FILING DATE: 2003-03-21

; PRIOR APPLICATION NUMBER: PCT/US02/33944

; PRIOR FILING DATE: 2002-10-23

; PRIOR APPLICATION NUMBER: US 60/335,215

; PRIOR FILING DATE: 2001-10-23

; PRIOR APPLICATION NUMBER: US 60/362,747

; PRIOR FILING DATE: 2002-03-07

; PRIOR APPLICATION NUMBER: US 60/412,618

; PRIOR FILING DATE: 2002-09-20

; NUMBER OF SEQ ID NOS: 33

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 9

; LENGTH: 6082

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Plasmid

US-10-695-667-9

Query Match 87.9%; Score 385.8; DB 17; Length 6082;

Best Local Similarity 93.7%; Pred. No. 1.4e-107;

Matches 402; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

```

Qy      6 CATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 65
          |||
Db      916 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATG 975
          |||

Qy      66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125

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```

Db      976  TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 1035
Qy      126  CATCACTTGTGCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
Db      1036  CATCACTTGTGCGGGCGAGTCAGGGCATTACCAATTATTTAGCCTGGTTTCAGCAGAAACC 1095
Qy      186  AGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 245
Db      1096  AGGGAAAGCCCCCTAAGTCCCTTATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATC 1155
Qy      246  AAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 305
Db      1156  AAAGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 1215
Qy      306  TGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCA 365
Db      1216  TGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCGATCACCTTCGGCCA 1275
Qy      366  GGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 425
Db      1276  AGGGACACGACTGGAGATTAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCC 1335
Qy      426  ATCTGATGA 434
Db      1336  ATCTGATGA 1344

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RESULT 2

US-09-859-053-29

; Sequence 29, Application US/09859053

; Patent No. US20020102658A1

; GENERAL INFORMATION:

; APPLICANT: Tsuji, Takashi

; APPLICANT: Tezuka, Katsunari

; APPLICANT: Hori, No. US20020102658A1uaki

; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODY AGAINST A

; TITLE OF INVENTION: COSTIMULATORY SIGNAL TRANSDUCTION MOLECULE AILIM AND

; TITLE OF INVENTION: PHARMACEUTICAL USE THEREOF

; FILE REFERENCE: 06501-079001

; CURRENT APPLICATION NUMBER: US/09/859,053

; CURRENT FILING DATE: 2001-05-16

; PRIOR APPLICATION NUMBER: JP 2001-99508

; PRIOR FILING DATE: 2001-03-30

; PRIOR APPLICATION NUMBER: JP 2000-147116

; PRIOR FILING DATE: 2000-05-18

; NUMBER OF SEQ ID NOS: 43

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 29

; LENGTH: 974

; TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: 5'UTR

; LOCATION: (1)...(38)

; NAME/KEY: CDS

; LOCATION: (39)...(746)

; NAME/KEY: 3'UTR
; LOCATION: (750)...(974)
; NAME/KEY: sig_peptide
; LOCATION: (39)...(104)
US-09-859-053-29

Query Match 86.8%; Score 381.2; DB 9; Length 974;
Best Local Similarity 92.4%; Pred. No. 2.4e-106;
Matches 401; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

```
Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
          ||||| | | ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      39 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC 98

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     99 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 158

Qy    121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    159 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGGTTGTTAGCCTGGTATCAGCAG 218

Qy    181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    219 AAACCAGGGAAAGCCCCCTAAACTCCTGATCTATGTTGCATCCAGTTTGCAAAGTGGGGTC 278

Qy    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    279 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 338

Qy    301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    339 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCGTGGACGTTTC 398

Qy    361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    399 GGCCAAGGGACCAAGGTGGAAATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 458

Qy    421 CCGCCATCTGATGA 434
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db    459 CCGCCATCTGATGA 472
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RESULT 10

US-10-625-105-29
; Sequence 29, Application US/10625105
; Publication No. US20040180052A1
; GENERAL INFORMATION:
; APPLICANT: Tsuji, Takashi
; APPLICANT: Tezuka, Katsunari
; APPLICANT: Hori, Nobuaki
; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODY AGAINST A
; TITLE OF INVENTION: COSTIMULATORY SIGNAL TRANSDUCTION MOLECULE AILIM AND
; TITLE OF INVENTION: PHARMACEUTICAL USE THEREOF
; FILE REFERENCE: 06501-079001
; CURRENT APPLICATION NUMBER: US/10/625,105
; CURRENT FILING DATE: 2003-07-22

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; PRIOR APPLICATION NUMBER: US/09/859,053
; PRIOR FILING DATE: 2001-05-16
; PRIOR APPLICATION NUMBER: JP 2001-99508
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: JP 2000-147116
; PRIOR FILING DATE: 2000-05-18
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 29
;   LENGTH: 974
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: 5'UTR
;   LOCATION: (1)...(38)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (39)...(746)
;   FEATURE:
;   NAME/KEY: 3'UTR
;   LOCATION: (750)...(974)
;   FEATURE:
;   NAME/KEY: sig_peptide
;   LOCATION: (39)...(104)
US-10-625-105-29

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Query Match          86.8%;   Score 381.2;   DB 17;   Length 974;
Best Local Similarity 92.4%;   Pred. No. 2.4e-106;
Matches 401;   Conservative 0;   Mismatches 33;   Indels 0;   Gaps 0;

```

```

Qy      1 ATGGACATGGAGTTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
      ||||| ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      39 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTTC 98

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      99 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 158

Qy     121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     159 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGGTTGTTAGCCTGGTATCAGCAG 218

Qy     181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     219 AAACCAGGGAAGCCCCCTAAACTCCTGATCTATGTTGCATCCAGTTTGCAAAGTGGGGTC 278

Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     279 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 338

Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     339 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCGTGGACGTTT 398

Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 420
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db     399 GGCCAAGGGACCAAGGTGGAATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 458

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Qy 421 CCGCCATCTGATGA 434
|||||||
Db 459 CCGCCATCTGATGA 472

RESULT 11

US-10-684-109-89

; Sequence 89, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 89
; LENGTH: 702
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-89

Query Match 86.2%; Score 378.4; DB 17; Length 702;
Best Local Similarity 92.8%; Pred. No. 1.6e-105;
Matches 397; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

Qy 7 ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
||| |
Db 1 ATGAGGCTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCCAGGTGT 60

Qy 67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
||| |
Db 61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACC 120

Qy 127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
||| |
Db 121 ATCACTTGCCGGGCAAGTCAGGGCATTAAAAATGATTTAGGCTGGTATCAGCAGAAACCA 180

Qy 187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
| |
Db 181 GGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 240

Qy 247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306
||| |
Db 241 AGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCT 300

Qy 307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
||| |

```

Db      301 GAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTATCCGTGCAGTTTTGGCCAG 360
Qy      367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
        |||
Db      361 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 420
Qy      427 TCTGATGA 434
        |||
Db      421 TCTGATGA 428

```

RESULT 12

US-10-684-109-90/c

; Sequence 90, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 90

; LENGTH: 702

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-90

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Query Match      86.2%; Score 378.4; DB 17; Length 702;
Best Local Similarity 92.8%; Pred. No. 1.6e-105;
Matches 397; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

```

```

Qy      7 ATGGAGTTCCCCGTTCTAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
        |||
Db      702 ATGAGGCTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCCAGGTGT 643
Qy      67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
        |||
Db      642 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACC 583
Qy      127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
        |||
Db      582 ATCACTTGCCGGGCAAGTCAGGGCATTAATAATGATTTAGGCTGGTATCAGCAGAAACCA 523
Qy      187 GAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 246
        |||
Db      522 GGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCA 463
Qy      247 AGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT 306

```

```

Db      462 AGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACCTCTCACAATCAGCAGCCTGCAGCCT 403
Qy      307 GAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTGGCCAG 366
Db      402 GAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTATCCGTGCAGTTTGGCCAG 343
Qy      367 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 426
Db      342 GGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA 283
Qy      427 TCTGATGA 434
Db      282 TCTGATGA 275

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RESULT 13

US-10-684-109-107

; Sequence 107, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 107

; LENGTH: 702

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-107

```

Query Match      86.2%;  Score 378.4;  DB 17;  Length 702;
Best Local Similarity  92.8%;  Pred. No. 1.6e-105;
Matches 397;  Conservative  0;  Mismatches 31;  Indels  0;  Gaps  0;

```

```

Qy      7 ATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCCAGATGT 66
Db      1 ATGAGGCTCCCTGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCCAGGTGT 60
Qy     67 GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACC 126
Db     61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACC 120
Qy    127 ATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA 186
Db    121 ATCACTTGCCGGGCAAGTCAGGGCATTAGAAATGATTTAGGCTGGTATCAGCAGAAACCG 180

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Db      119 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGGATCTGTAGGAGACAGA 178
Qy      121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      179 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 238
Qy      181 AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
        ||||||| ||||||||||||| ||||||||||| ||| |||||||||||||||||||||
Db      239 AAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGGATCCAGTTTGCAAAGTGGGGTC 298
Qy      241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      299 CCATCAAGGTTTCAGCGGCAGTGGATTTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 358
Qy      301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
        |||||||||||||||||||||||| || || ||||| | |||| ||| || ||
Db      359 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAGCAGTTTCCCTCGGACATTC 418
Qy      361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
        ||||| ||||||||| ||||||||||||| || |||||||||||||||||||||
Db      419 GGCCAAGGGACCAAGGTGGAGATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTC 478
Qy      421 CCGCCATCTGATGA 434
        |||||||||||||
Db      479 CCGCCATCTGATGA 492

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Search completed: December 3, 2004, 02:43:21
Job time : 337.578 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:03 ; Search time 2285.1 Seconds
(without alignments)
7000.593 Million cell updates/sec

Title: US-08-728-463B-208
Perfect score: 439
Sequence: 1 ATGGACATGGAGTTCCCCGT.....CCCGCCATCTGATGAAGCTT 439

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 32822875 seqs, 18219865908 residues

Total number of hits satisfying chosen parameters: 65645750

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : EST:*

- 1: gb_est1:*
- 2: gb_est2:*
- 3: gb_hlc:*
- 4: gb_est3:*
- 5: gb_est4:*
- 6: gb_est5:*
- 7: gb_est6:*
- 8: gb_gss1:*
- 9: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	%		Query		DB	ID	Description
	No.	Score	Match	Length			
1	395.6	90.1	943	2	BF976230	BF976230 602245105	
2	394	89.7	961	4	BG341988	BG341988 602463136	
3	389.2	88.7	886	4	BG756818	BG756818 602710291	
4	388.2	88.4	689	6	CB055233	CB055233 NISC_gm08	
5	384.6	87.6	538	6	CD691107	CD691107 EST7630 h	
6	384.4	87.6	606	6	CD690290	CD690290 EST6813 h	
7	384.4	87.6	610	6	CD691065	CD691065 EST7588 h	
8	384.4	87.6	1100	2	BF663472	BF663472 602144635	
9	383.4	87.3	813	4	BG431143	BG431143 602498773	
10	382.8	87.2	736	6	CB986552	CB986552 AGENCOURT	
11	382.8	87.2	755	4	BG533970	BG533970 602553071	
12	382.8	87.2	769	6	CB957759	CB957759 AGENCOURT	
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14	379.6	86.5	513	6	CD690596	CD690596 EST7119 h	
15	379.6	86.5	545	6	CD697196	CD697196 EST13719	
16	379.6	86.5	605	6	CD688415	CD688415 EST4937 h	
17	378.8	86.3	475	6	CD706608	CD706608 EST23135	
18	378.8	86.3	1038	4	BG757218	BG757218 602710591	
19	376.4	85.7	597	6	CD704919	CD704919 EST21446	
20	376.4	85.7	750	6	CB985329	CB985329 AGENCOURT	
21	376.4	85.7	923	5	BQ709093	BQ709093 AGENCOURT	
22	376.4	85.7	956	5	BQ706389	BQ706389 AGENCOURT	
23	375.6	85.6	894	4	BG341803	BG341803 602463535	
24	375	85.4	726	6	CB986484	CB986484 AGENCOURT	
25	374.8	85.4	497	6	CD696718	CD696718 EST13241	
26	374.8	85.4	558	6	CD690030	CD690030 EST6553 h	
27	374.8	85.4	625	6	CD688395	CD688395 EST4917 h	
28	374.8	85.4	684	4	BG686677	BG686677 602650635	
29	374.8	85.4	697	6	CD699896	CD699896 EST16420	
30	374.8	85.4	761	4	BG745186	BG745186 602723509	
31	374.8	85.4	875	4	BG685868	BG685868 602637982	
32	374	85.2	851	4	BG686018	BG686018 602638582	
33	373.2	85.0	624	6	CD690145	CD690145 EST6668 h	
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36	373.2	85.0	867	4	BG754732	BG754732 602714301	

37	371.6	84.6	481	6	CD695408	CD695408	EST11931
38	371.6	84.6	499	6	CD700057	CD700057	EST16581
39	371.6	84.6	556	6	CD694411	CD694411	EST10934
40	371.6	84.6	588	6	CD705013	CD705013	EST21540
41	371.6	84.6	617	6	CD689887	CD689887	EST6410 h
42	371.6	84.6	770	6	CB987520	CB987520	AGENCOURT
43	371.6	84.6	920	7	CO583330	CO583330	ILLUMIGEN
44	370.8	84.5	921	4	BG341239	BG341239	602463904
45	370.2	84.3	757	6	CB985034	CB985034	AGENCOURT

ALIGNMENTS

RESULT 1

BF976230

LOCUS BF976230 943 bp mRNA linear EST 22-JAN-2001

DEFINITION 602245105F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4336225 5', mRNA sequence.

ACCESSION BF976230

VERSION BF976230.1 GI:12343445

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 943)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Louis M. Staudt, M.D., Ph.D.

cDNA Library Preparation: Ling Hong/Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM1208 row: j column: 02

High quality sequence stop: 721.

FEATURES

source

Location/Qualifiers

1. .943

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:4336225"

/tissue_type="primary B-cells from tonsils (cell line)"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_48"

/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;

Site_2: EcoRI; cDNA made by oligo-dT priming.

Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit

(Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."

ORIGIN

Query Match 90.1%; Score 395.6; DB 2; Length 943;
Best Local Similarity 94.5%; Pred. No. 2.6e-106;
Matches 410; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
        |||||
Db      18 ATGGACATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTC 77

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        |||||
Db     78 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 137

Qy    121 GTCACCATCACTTGTTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||
Db    138 GTCACCATCACTTGTTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 197

Qy    181 AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
        |||||
Db    198 AAACCAGGGAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 257

Qy    241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
        |||||
Db    258 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 317

Qy    301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
        |||||
Db    318 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCTCACACTTTT 377

Qy    361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
        |||||
Db    378 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 437

Qy    421 CCGCCATCTGATGA 434
        |||||
Db    438 CCGCCATCTGATGA 451
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RESULT 2

BG341988

LOCUS BG341988 961 bp mRNA linear EST 27-FEB-2001
DEFINITION 602463136F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4575800 5',
mRNA sequence.

ACCESSION BG341988

VERSION BG341988.1 GI:13148426

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 961)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1287 row: h column: 09
 High quality sequence stop: 655.

FEATURES Location/Qualifiers
 source 1. .961
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4575800"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 89.7%; Score 394; DB 4; Length 961;
 Best Local Similarity 94.2%; Pred. No. 8e-106;
 Matches 409; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

Qy	1	ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC	60
Db	16	ATGGACATGAGGGTCCTCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC	75
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	76	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGGCACAGA	135
Qy	121	GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	136	GTCACCATCACTTGTCTGGGCGAGTCAGAAATGTTAGCAGGTGGTTAGCCTGGTATCAGCAG	195
Qy	181	AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	196	AGACCAGAGAAAGCCCCTAAGTCCCTGATCTATGCTACATCCAGTTTGACAGTGGGGTC	255
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	256	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	315
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360

Db 316 CAGCCTGAAGATTTTGC AACTTATTACTGCCAACAGTATAATACTTACCCTCTCACTTTC 375

Qy 361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
 ||| ||||||||| |||||||||||||||||||||||||||||||||||

Db 376 GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 435

Qy 421 CCGCCATCTGATGA 434
 |||||||||||||

Db 436 CCGCCATCTGATGA 449

RESULT 3

BG756818

LOCUS BG756818 886 bp mRNA linear EST 15-MAY-2001

DEFINITION 602710291F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4850686 5', mRNA sequence.

ACCESSION BG756818

VERSION BG756818.1 GI:14067471

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 886)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Louis M. Staudt, M.D., Ph.D.

cDNA Library Preparation: Ling Hong/Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM1692 row: e column: 23

High quality sequence stop: 864.

FEATURES

source

Location/Qualifiers

1. .886

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:4850686"

/tissue_type="primary B-cells from tonsils (cell line)"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_48"

/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;

Site_2: EcoRI; cDNA made by oligo-dT priming.

Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).

Note: this is a NIH_MGC Library."

ORIGIN

Query Match 88.7%; Score 389.2; DB 4; Length 886;
Best Local Similarity 93.5%; Pred. No. 2.1e-104;
Matches 406; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy	1	ATGGACATGAGTATCCCGTTCCAGTCTCCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCC	60
Db	10	ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCACAGGTGCC	69
Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	70	AGGTGTGACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGA	129
Qy	121	GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	130	GTCACCATCACTTGCCGGGCAAGTCAGGGCATTAGAAATGATTAGGCTGGTATCAGCAG	189
Qy	181	AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	190	AAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC	249
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	250	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTG	309
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	310	CAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTACCCGTACACTTTT	369
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	370	GGCCTGGGGACCAAGCTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC	429
Qy	421	CCGCCATCTGATGA	434
Db	430	CCGCCATCTGATGA	443

RESULT 4

CB055233

LOCUS	CB055233	689 bp	mRNA	linear	EST 17-JAN-2003
-------	----------	--------	------	--------	-----------------

DEFINITION NISC qm08f08.y1 NCI CGAP Brn23 Homo sapiens cDNA clone

IMAGE:3291807 5', mRNA sequence.

ACCESSION CB055233

VERSION CB055233.1 GI:27793520

KEYWORDS EST.

SOURCE	Homo sapiens (human)
--------	----------------------

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 689)

AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.

TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index

JOURNAL Unpublished (1997)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cqapbs-r@mail.nih.gov

cDNA Library Arrayed by: The I.M.A.G.E. Consortium/LLNL
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC)

Plate: LLAM8061 row: L column: 16
Seq primer: M13RP1 reverse primer (ABI).

Location/Qualifiers

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1. 689
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3291807"
/tissue_type="glioblastoma (pooled)"
/lab_host="DH10B"
/clone_lib="NCI_CGAP_Brn23"
/note="Organ: brain; Vector: pT7T3D-Pac (Pharmacia) with a
modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st
strand cDNA was primed with a Not I - oligo(dT) primer [5'
TGTTACCAATCTGAAGTGGGAGCGGCCGCATATCTTTTTTTTTTTTTTTTTTTTTT
T 3']; double-stranded cDNA was ligated to Eco RI
adaptors (Pharmacia), digested with Not I and cloned into
the Not I and Eco RI sites of the modified pT7T3 vector.
Library is normalized, and was constructed by Bento
Soares and M.Fatima Bonaldo."
```

Query Match 88.4%; Score 388.2; DB 6; Length 689;
Best Local Similarity 93.5%; Pred. No. 3.9e-104;
Matches 405; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy	2	TGGACATGAGATTCCCCGTTCAGCTCCTGGGGTCTCGTGCTCTGTTTCCCAGGTGCCA	61
Db	10	TGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGTCTGCTCTGGCTCCCAAGGTGCCA	69
Qy	62	GATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAG	121
Db	70	AATGTGACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAG	129
Qy	122	TCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGA	181
Db	130	TCACCATCCCTTGCCGGGCCAGTCAGAGTATTAGTAGCTGGTTGGCCTGGTATCAGCAGA	189
Qy	182	AACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTCC	241
Db	190	AACCAGGGAAAGCCCCTAAGTCCCTGATCTATAAGGCATCTAGTTTAGAAAGTGGGGTCC	249
Qy	242	CATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGC	301
Db	250	CATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGC	309
Qy	302	AGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTTTG	361
Db	310	AGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCGTACACTTTTTG	369

QY 362 GCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCC 421
 |||
 Db 370 GCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCC 429
 QY 422 CGCCATCTGATGA 434
 |||
 Db 430 CGCCATCTGATGA 442

RESULT 5

CD691107

LOCUS CD691107 538 bp mRNA linear EST 25-JUN-2003

DEFINITION EST7630 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD691107

VERSION CD691107.1 GI:32212503

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 538)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743

Fax: 86-20-8775-4506

Email: yxzeng@gzsums.edu.cn.

FEATURES

source

Location/Qualifiers

1..538

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/tissue_type="normal nasopharynx"

/clone_lib="human nasopharynx"

/note="ESTs generated from a normal nasopharynx cDNA

library from southern Chinese"

ORIGIN

Query Match 87.6%; Score 384.6; DB 6; Length 538;

Best Local Similarity 94.3%; Pred. No. 4.3e-103;

Matches 410; Conservative 0; Mismatches 24; Indels 1; Gaps 1;

QY 1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
 |||
 Db 50 ATGGACATGAGGGTCCTCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 109
 QY 61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
 |||
 Db 110 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 169
 QY 121 GTCACCATCACTTGTGCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
 |||

Db 170 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAACACCTGGTTAGCCTGGTATCAGCAG 229
 Qy 181 AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
 ||||| |||||
 Db 230 CAACCAGACAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCACTTTGCAAAGTGGGGTC 289
 Qy 241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
 || |||||
 Db 290 CCCTCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 349
 Qy 301 CAGCCTGAAGATTTTGCAA-CTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTT 359
 ||||| |||||
 Db 350 CAGCCTGAAGATTTTGCAAGCTTATTACTGCCAGCAGTATAAGAGTTACCCCTCACTTT 409
 Qy 360 TGGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTT 419
 ||| |||||
 Db 410 CGGCGGAGGGACCAAGGTGGAGATGAAACGAACTGTGGCTGCACCATCTGTCTTCATCTT 469
 Qy 420 CCCGCCATCTGATGA 434
 |||||
 Db 470 CCCGCCATCTGATGA 484

RESULT 6

CD690290

LOCUS CD690290 606 bp mRNA linear EST 25-JUN-2003

DEFINITION EST6813 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD690290

VERSION CD690290.1 GI:32210896

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 606)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743

Fax: 86-20-8775-4506

Email: yxzeng@gzsums.edu.cn.

FEATURES

source

Location/Qualifiers

1. .606

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/tissue_type="normal nasopharynx"

/clone_lib="human nasopharynx"

/note="ESTs generated from a normal nasopharynx cDNA

library from southern Chinese"

ORIGIN

Query Match 87.6%; Score 384.4; DB 6; Length 606;
 Best Local Similarity 92.9%; Pred. No. 5.1e-103;
 Matches 403; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      68 ATGGACATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTC 127

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     128 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCTGTGTCTGCATCTGTAGGAGACAGA 187

Qy     121 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     188 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 247

Qy     181 AAACCAGAGAAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     248 AAACCAGGGAAAAGCCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 307

Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     308 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACTATCAGCAGCCTG 367

Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     368 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCCCCGCCACTTTC 427

Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
        |||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     428 GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 487

Qy     421 CCGCCATCTGATGA 434
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     488 CCGCCATCTGATGA 501
  
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RESULT 7

CD691065

LOCUS CD691065 610 bp mRNA linear EST 25-JUN-2003

DEFINITION EST7588 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD691065

VERSION CD691065.1 GI:32212419

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 610)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Email: yxzeng@gzsums.edu.cn.

FEATURES
source Location/Qualifiers
1. .610
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/tissue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx cDNA
library from southern Chinese"

ORIGIN

Query Match 87.6%; Score 384.4; DB 6; Length 610;
Best Local Similarity 92.9%; Pred. No. 5.1e-103;
Matches 403; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Db      44 ATGGACATGAGGGTCCCCGCTCAGCTCCGGGGGCTCCTGCTGCTCTGGCTCCCAGGTGCC 103
      |||
Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
      |||
Db     104 AAATGTGACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGA 163
      |||
Qy     121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      |||
Db     164 GTCACCATCACTTGCCTGGGCCAGTCAGAGTATTAGTAGCTGGTTGGCCTGGTATCAGCAA 223
      |||
Qy     181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
      |||
Db     224 AAACCAGGGAAAGCCCCCTAAGCTCCTGATCTATAAGGCGTCTAGTTTAGAAAGTGGGGTC 283
      |||
Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
      |||
Db     284 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTG 343
      |||
Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
      |||
Db     344 CAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTATCCGTACACTTTT 403
      |||
Qy     361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
      |||
Db     404 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 463
      |||
Qy     421 CCGCCATCTGATGA 434
      |||
Db     464 CCGCCATCTGATGA 477
```

RESULT 8

BF663472

LOCUS BF663472 1100 bp mRNA linear EST 21-DEC-2000

DEFINITION 602144635F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4297736 5',
mRNA sequence.

ACCESSION BF663472

VERSION BF663472.1 GI:11937367
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1100)
 AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1152 row: f column: 09
 High quality sequence stop: 704.
 FEATURES Location/Qualifiers
 source 1..1100
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4297736"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the
 following 5' adaptor: GGCACGAG(G). Size-selected >500bp
 for average insert size 1.8kb. Library constructed by Ling
 Hong in the laboratory of Gerald M. Rubin (University of
 California, Berkeley) using ZAP-cDNA synthesis kit
 (Stratagene) and Superscript II RT (Life Technologies).
 Note: this is a NIH_MGC Library."

ORIGIN

Query Match 87.6%; Score 384.4; DB 2; Length 1100;
 Best Local Similarity 92.9%; Pred. No. 5.9e-103;
 Matches 403; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTCTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 50
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Db      8 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC 67

Qy     61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     68 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGA 127

Qy    121 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
        |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db    128 GTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 187
  
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[illegible]

BG431143

LOCUS	BG431143	813 bp	mRNA	linear	EST 14-MAR-2001
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ACCESSION BG431143

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 813)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cqapbs-r@mail.nih.gov

Tissue Procurement: CLONTECH Laboratories, Inc.

cDNA Library Preparation: CLONTECH Laboratories, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM1360 row: b column: 19

High quality sequence stop: 715.

FEATURES

source

Location/Qualifiers

1. .813

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/organism="Homo sapiens"
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/mol type="mRNA"
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/db xref="taxon:9606"
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/clone="IMAGE:4612146"
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/lab host="DH10B (T1 phage-resistant)"
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/clone lib="NIH MGC 75"
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/note="Organ: kidney; Vector: pDNR-LIB (Clontech); Site 1:

ORIGIN

Qy	1	ATGGACATGGAGTTCCCCGTTTCAGTCTCTGGGGCTCCTGCTGCTCTGTTTCCAGGTGCC	60
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Qy	61	AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	120
Db	87	AGATGTGACATTTCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA	146
Qy	121	GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG	180
Db	147	GTCACCATCACTTGTCTGGGCGAGTCAGGGCATTAGCAATTATTTAGCCTGGTTTCAGCAG	206
Qy	181	AAACCAGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	207	AAACCAGGGAAAGCCCCTAAGTCCCTGATGTATGCTGCATCCAGTNTGCAAAGTGGAGTC	266
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	267	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGCCTG	326
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	327	CAGCCTGAAGACTTTTGCAATTTATTACTGCCTACAGTATAATACTTACCCTCATACTTTC	386
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	387	GGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	446
Qy	421	CCGCCATCTGATGA	434
Db	447	CCGCCATCTGATGA	460

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LOCUS      CB986552                736 bp      mRNA      linear      EST 01-MAY-2003
DEFINITION AGENCOURT_13646929 NIH_MGC_184 Homo sapiens cDNA clone
            IMAGE:30327773 5', mRNA sequence.
ACCESSION  CB986552
VERSION    CB986552.1  GI:30281072
KEYWORDS   EST.
SOURCE     Homo sapiens (human)

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SfiI (ggccgcctcggcc); Site_2: SfiI (ggccattatggcc); 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.9 kb (range 0.5-4.0 kb). 12/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA). Note: this is a NIH_MGC Library."

ORIGIN

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Query Match          87.2%;  Score 382.8;  DB 4;  Length 755;
Best Local Similarity 92.6%;  Pred. No. 1.6e-102;
Matches 402;  Conservative 0;  Mismatches 32;  Indels 0;  Gaps 0;

Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Db      28 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCC 87

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
      |||
Db      88 AGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACGGA 147

Qy     121 GTCACCATCACTTGTCTGGGCGAGTCAAGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
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Db     148 GTCACCATCACTTGTCTGGGCGAGTCAAGGTATCAGCAGCTGGTTAGCCTGGTATCAGCAG 207

Qy     181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
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Db     208 AAAGCAGGGAAAGCCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTC 267

Qy     241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
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Db     268 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 327

Qy     301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
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Db     328 CAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGGTAACAGTTTCCCTTTCACTTTT 387

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Db     388 GGCGGAGGGACCAAGGTGGAGATCAAACGAAGTGTGGCTGCACCATCTGTCTTCATCTTC 447

Qy     421 CCGCCATCTGATGA 434
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Db     448 CCGCCATCTGATGA 461

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RESULT 12

CB957759

LOCUS CB957759 769 bp mRNA linear EST 29-APR-2003

DEFINITION AGENCOURT_13778810 NIH_MGC_184 Homo sapiens cDNA clone

IMAGE:30351152 5', mRNA sequence.

ACCESSION CB957759

VERSION CB957759.1 GI:30213876

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 769)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
 cDNA Library Preparation: CLONTECH Laboratories, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: NDCM148 row: d column: 09
 High quality sequence stop: 523.

FEATURES Location/Qualifiers

source 1..769
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 /clone="IMAGE:30351152"
 /lab_host="DH10B (T1 phage-resistant)"
 /clone_lib="NIH_MGC_184"
 /note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
 SfiI (ggccattatggcc); Site_2: SfiI (ggccgcctcggcc);
 Library is oligo-dT primed and directionally cloned. cDNA
 was prepared from a glandular pool of tissues from thyroid,
 parathyroid, adrenal, cortex and pineal gland. 5' and 3'
 adaptors were used in cloning as follows: 5' adaptor
 sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
 5'-ATTCTAGAGCCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A,
 C, or G and N = A, C, G, or T). Average insert size 1.38
 kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
 by PCR. This library was enriched for full-length clones
 and was constructed by Clontech Laboratories (Palo Alto,
 CA). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 87.2%; Score 382.8; DB 6; Length 769;
 Best Local Similarity 92.6%; Pred. No. 1.6e-102;
 Matches 402; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTCTAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      27 ATGGACATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGCTCCCAGGTGCC 86

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
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Db      87 AGATGTGACATTCACTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGA 146

Qy     121 GTCACCATCACTTGTCCGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db     147 GTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGTAGTTATTTAGCCTGGTATCAGCAA 206

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Qy	181	AAACCAGAGAAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC	240
Db	207	AAACCAGGGAAAGCCCCCTAAGCTCCTGATCTATGATGCATCCACTTTGCCAAAGTGGGGTC	266
Qy	241	CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG	300
Db	267	CCAGCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCAATCAGCAGCCTG	326
Qy	301	CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT	360
Db	327	CAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGCTTAATAATTACCCGTACACTTTT	386
Qy	361	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	420
Db	387	GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC	446
Qy	421	CCGCCATCTGATGA	434
Db	447	CCGCCATCTGATGA	460

RESULT 13

CD710508

LOCUS CD710508 574 bp mRNA linear EST 25-JUN-2003

DEFINITION EST27035 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD710508

VERSION CD710508.1 GI:32241138

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 574)

AUTHORS Liu, X.-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and
 Zeng, Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743

Fax: 86-20-8775-4506

Email: yxzeng@gzsums.edu.cn.

FEATURES	Location/Qualifiers
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/db xref="taxon:9606"
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/tissue type="normal nasopharynx"

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/note="ESTs generated from a normal nasopharynx cDNA

library from southern Chinese"

ORIGIN

Query Match 86.8%; Score 381.2; DB 6; Length 574;

Best Local Similarity 92.4%; Pred. No. 4.5e-102;

Matches 401; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCCGTTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Qy     121 GTCACCATCACTTGTCTGGGGCAGTCAAGGTATTAGCAGCTGGT'TAGCCTGGTATCAGCAG 180
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Qy     421 CCGCCATCTGATGA 434
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Db     484 CCGCCATCTGATGA 497
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RESULT 14

CD690596

LOCUS CD690596 513 bp mRNA linear EST 25-JUN-2003

DEFINITION EST7119 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD690596

VERSION CD690596.1 GI:32211490

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 513)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng

Cancer Center

Sun Yat-sen University

651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743

Fax: 86-20-8775-4506

FEATURES

source

1. .513

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/clone lib="human nasopharynx"
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/note="ESTs generated from a normal nasopharynx cDNA

library from southern Chinese"

ORIGIN

Query Match 86.5%; Score 379.6; DB 6; Length 513;

Best Local Similarity 92.2%; Pred. No. 1.3e-101;

Matches 400; Conservative 0; Mismatches 34; Indels 0; Gaps 0;

[illegible]

RESULT 15

CD697196

LOCUS	CD697196	545 bp	mRNA	linear	EST 25-JUN-2003
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DEFINITION EST13719 human nasopharynx Homo sapiens cDNA, mRNA sequence.

ACCESSION CD697196

VERSION CD697196.1 GI:32224445

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 545)

AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.

TITLE Transcriptional Gene Expression Profile of Human Nasopharynx

JOURNAL Unpublished (2003)

COMMENT Contact: YiXin Zeng
 Cancer Center
 Sun Yat-sen University
 651 DongFeng Road East, GuangZhou 510060, China
 Tel: 86-1380-9770-743
 Fax: 86-20-8775-4506
 Email: yxzeng@gzsums.edu.cn.

FEATURES Location/Qualifiers

source 1..545
 /organism="Homo sapiens"
 /mol_type="mRNA"
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 /tissue_type="normal nasopharynx"
 /clone_lib="human nasopharynx"
 /note="ESTs generated from a normal nasopharynx cDNA
 library from southern Chinese"

ORIGIN

Query Match 86.5%; Score 379.6; DB 6; Length 545;
 Best Local Similarity 92.2%; Pred. No. 1.3e-101;
 Matches 400; Conservative 0; Mismatches 34; Indels 0; Gaps 0;

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Qy      1 ATGGACATGGAGTTCCCGTTCAGCTCCTGGGGCTCCTGCTGCTCTGTTTCCCAGGTGCC 60
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Db      57 ATGGACATGAGGGTCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTGCC 116

Qy      61 AGATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGA 120
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Db      117 AGGTGTGACATCCAGATGACCCAGTCTCCATCTGCCATGTCTGCATCTGTAGGAGACAGA 176

Qy      121 GTCACCATCACTTGTCTGGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAG 180
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      177 GTCACCATCACTTGTCTGGGCGAGTCAGGGCATTAGCAATTATTTAGCCTGGTTTCAGCAG 236

Qy      181 AAACCAGAGAAAGCCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTTGCAAAGTGGGGTC 240
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Qy      241 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTG 300
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Db      297 CCATCAAGGTTTCAGCGGCAGTGGATCTGGGACAGAATTCATCTCACAAATCAGCAGCCTG 356

Qy      301 CAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTT 360
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Db      357 CAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTATTATCCGTACACTTTT 416

Qy      361 GGCCAGGGGACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 420
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Db      417 GGCCAGTGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTC 476

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Qy 421 CCGCCATCTGATGA 434
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Db 477 CCGCCATCTGATGA 490

Search completed: December 2, 2004, 20:56:34
Job time : 2287.1 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search; using sw model

Run on: December 2, 2004, 12:19:02 ; Search time 2803.28 Seconds
(without alignments)
8839.572 Million cell updates/sec

Title: US-08-728-463B-219
Perfect score: 524
Sequence: 1 AAGCTTGCCACCATGAAACA.....GACTACTTCCCCGAACCGGT 524

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4526729 seqs, 23644849745 residues

Total number of hits satisfying chosen parameters: 9053458

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : GenEmbl:*
1: gb_ba:*
2: gb_htg:*
3: gb_in:*
4: gb_om:*
5: gb_ov:*
6: gb_pat:*
7: gb_ph:*
8: gb_pl:*
9: gb_pr:*
10: gb_ro:*
11: gb_sts:*
12: gb_sy:*
13: gb_un:*
14: gb_vi:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	%		DB	ID	Description
		Query	Match Length			
1	524	100.0	524	6	AR161428	AR161428 Sequence
2	524	100.0	524	6	AR369973	AR369973 Sequence
3	524	100.0	524	6	BD096607	BD096607 Transgeni

4	524	100.0	4926	6	AR161427	AR161427 Sequence
5	524	100.0	4926	6	AR370022	AR370022 Sequence
6	524	100.0	4926	6	BD096656	BD096656 Transgeni
7	436.8	83.4	1507	6	BD000501	BD000501 Process f
8	423.6	80.8	1581	9	BC073766	BC073766 Homo sapi
9	399	76.1	1634	6	BD217688	BD217688 Immune sy
10	397.2	75.8	1418	6	A49389	A49389 Sequence 7
11	395.6	75.5	1418	6	AR176296	AR176296 Sequence
12	392.8	75.0	1567	6	AR135359	AR135359 Sequence
13	392	74.8	1599	9	BC075842	BC075842 Homo sapi
14	386.2	73.7	476	9	AF245309	AF245309 Homo sapi
15	385.2	73.5	2674	6	AR242984	AR242984 Sequence
16	383.8	73.2	403	6	AR161374	AR161374 Sequence
17	383.8	73.2	403	6	AR369967	AR369967 Sequence
18	383.8	73.2	403	6	BD096601	BD096601 Transgeni
19	376.8	71.9	404	6	AR161372	AR161372 Sequence
20	376.8	71.9	404	6	AR369965	AR369965 Sequence
21	376.8	71.9	404	6	BD096599	BD096599 Transgeni
22	371.8	71.0	1581	9	AK130585	AK130585 Homo sapi
23	368.6	70.3	1589	9	AK130813	AK130813 Homo sapi
24	367	70.0	2013	9	AK058037	AK058037 Homo sapi
25	366.2	69.9	1431	6	E10697	E10697 cDNA encodi
26	366.2	69.9	1589	9	BC073773	BC073773 Homo sapi
27	363.6	69.4	829	6	BD059850	BD059850 Secreted
28	358.2	68.4	1765	6	E07334	E07334 cDNA sequen
29	358	68.3	1596	9	AK098516	AK098516 Homo sapi
30	357	68.1	472	9	AY393075	AY393075 Homo sapi
31	356.4	68.0	487	9	AY393076	AY393076 Homo sapi
32	354.8	67.7	1431	6	AR108867	AR108867 Sequence
33	354.8	67.7	1431	6	AR265201	AR265201 Sequence
34	354.8	67.7	1431	6	AR488223	AR488223 Sequence
35	353.2	67.4	1431	6	BD063039	BD063039 Identific
36	352.2	67.2	7528	6	AX080953	AX080953 Sequence
37	351.6	67.1	588	9	AF013622	AF013622 Homo sapi
38	349.2	66.6	475	9	AY393082	AY393082 Homo sapi
39	349	66.6	417	9	AF062158	AF062158 Homo sapi
40	347.6	66.3	420	9	AF062101	AF062101 Homo sapi
41	346.8	66.2	411	9	HST22X18	Z75392 H.sapiens m
42	346.4	66.1	426	9	HSA240590	AJ240590 Homo sapi
43	346.4	66.1	542	9	HUMIGHEAVD	L22587 Human immun
44	345.2	65.9	432	9	HSA240580	AJ240580 Homo sapi
45	344.4	65.7	417	9	HUMIGHW	M74018 Homo sapien

ALIGNMENTS

RESULT 1

AR161428

LOCUS AR161428 524 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 419 from patent US 6255458.

ACCESSION AR161428

VERSION AR161428.1 GI:16227305

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 524)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE High affinity human antibodies and human antibodies against digoxin
 JOURNAL Patent: US 6255458-A 419 03-JUL-2001;
 FEATURES Location/Qualifiers
 source 1..524
 /organism="unknown"
 /mol_type="unassigned DNA"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 524;
 Best Local Similarity 100.0%; Pred. No. 6.3e-131;
 Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
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Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        |||
Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        |||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
        |||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
        |||
Db    241 AACTACAACCCGTCTCTCAAGAGTTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
        |||
Db    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy    361 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
        |||
Db    361 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

Qy    421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
        |||
Db    421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy    481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        |||
Db    481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
  
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RESULT 2

AR369973
 LOCUS AR369973 524 bp DNA linear PAT 12-SEP-2003
 DEFINITION Sequence 219 from patent US 6300129.
 ACCESSION AR369973
 VERSION AR369973.1 GI:34606413

KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 524)
AUTHORS Lonberg,N. and Kay,R.M.
TITLE Transgenic non-human animals for producing heterologous antibodies
JOURNAL Patent: US 6300129-A 219 09-OCT-2001;
FEATURES Location/Qualifiers
source 1..524
/organism="unknown"
/mol_type="genomic DNA"
ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 524;
Best Local Similarity 100.0%; Pred. No. 6.3e-131;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
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Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

QY      61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
      |||
Db      61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

QY      121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
      |||
Db      121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

QY      181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
      |||
Db      181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240

QY      241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
      |||
Db      241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

QY      301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
      |||
Db      301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

QY      361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
      |||
Db      361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

QY      421 ACCAAGGGCCCACATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
      |||
Db      421 ACCAAGGGCCCACATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

QY      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

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LOCUS BD096607 524 bp DNA linear PAT 27-AUG-2002
 DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.
 ACCESSION BD096607
 VERSION BD096607.1 GI:22642195
 KEYWORDS JP 2001527386-A/134.
 SOURCE unidentified
 ORGANISM unidentified
 unclassified.
 REFERENCE 1 (bases 1 to 524)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE Transgenic non-human animals capable of producing heterologous antibodies
 JOURNAL Patent: JP 2001527386-A 134 25-DEC-2001;
 GENPHARM INTERNATIONAL
 COMMENT OS Unidentified
 PN JP 2001527386-A/134
 PD 25-DEC-2001
 PF 01-DEC-1997 JP 1998525687
 PR 02-DEC-1996 US 08/758417
 PI NILS LONBERG,ROBERT M KAY
 PC C12N5/00,C12N5/28,C12N5/24,C12N5/10,C07K16/00,A61K39/00 CC
 Strandedness: Single;
 CC Topology: Linear;
 CC Transgenic non-human animals capable of
 producing heterologous
 CC antibodies
 FH Key Location/Qualifiers
 FT source 1. .524
 FT /organism='Unidentified'.
 FEATURES Location/Qualifiers
 source 1. .524
 /organism="unidentified"
 /mol_type="genomic DNA"
 /db_xref="taxon:32644"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 524;
 Best Local Similarity 100.0%; Pred. No. 6.3e-131;
 Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG	60
Db	1	AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG	60
Qy	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Db	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240
Db	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240

Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
 |||
 Db 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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 Db 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

RESULT 4

AR161427

LOCUS AR161427 4926 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 418 from patent US 6255458.

ACCESSION AR161427

VERSION AR161427.1 GI:16227303

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 4926)

AUTHORS Lonberg,N. and Kay,R.M.

TITLE High affinity human antibodies and human antibodies against digoxin

JOURNAL Patent: US 6255458-A 418 03-JUL-2001;

FEATURES Location/Qualifiers

source 1..4926

/organism="unknown"

/mol_type="unassigned DNA"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 4926;

Best Local Similarity 100.0%; Pred. No. 5.9e-131;

Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
 |||
 Db 16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy 61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
 |||
 Db 76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy 121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
 |||
 Db 136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195

Qy 181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
 |||
 Db 196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 255
 Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315
 Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
 |||
 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375
 Qy 361 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 376 GTAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 435
 Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539

RESULT 5

AR370022

LOCUS AR370022 4926 bp DNA linear PAT 12-SEP-2003

DEFINITION Sequence 268 from patent US 6300129.

ACCESSION AR370022

VERSION AR370022.1 GI:34606462

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 4926)

AUTHORS Lonberg,N. and Kay,R.M.

TITLE Transgenic non-human animals for producing heterologous antibodies

JOURNAL Patent: US 6300129-A 268 09-OCT-2001;

FEATURES Location/Qualifiers

source 1. .4926

/organism="unknown"

/mol_type="genomic DNA"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 4926;

Best Local Similarity 100.0%; Pred. No. 5.9e-131;

Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
 |||
 Db 16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75
 Qy 61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
 |||
 Db 76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy 121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
 |||
 Db 136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195
 |||
 Qy 181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
 |||
 Db 196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 255
 |||
 Qy 241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
 |||
 Db 256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315
 |||
 Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
 |||
 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375
 |||
 Qy 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 376 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435
 |||
 Qy 421 ACCAAGGGCCCATCGGTC'TTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 436 ACCAAGGGCCCATCGGTC'TTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495
 |||
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539
 |||

RESULT 6

BD096656

LOCUS BD096656 4926 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.

ACCESSION BD096656

VERSION BD096656.1 GI:22642244

KEYWORDS JP 2001527386-A/183.

SOURCE unidentified

ORGANISM unidentified

unclassified.

REFERENCE 1 (bases 1 to 4926)

AUTHORS Lonberg,N. and Kay,R.M.

TITLE Transgenic non-human animals capable of producing heterologous antibodies

JOURNAL Patent: JP 2001527386-A 183 25-DEC-2001;
 GENPHARM INTERNATIONAL

COMMENT OS Unidentified

PN JP 2001527386-A/183

PD 25-DEC-2001

PF 01-DEC-1997 JP 1998525687

PR 02-DEC-1996 US 08/758417

PI NILS LONBERG,ROBERT M KAY

PC C12N5/00,C12N5/28,C12N5/24,C12N5/10,C07K16/00,A61K39/00 CC

Strandedness: Single;

CC Topology: Linear;

CC Transgenic non-human animals capable of
 producing heterologous

CC antibodies
FH Key Location/Qualifiers
FT source 1. .4926
FT /organism='Unidentified'.

FEATURES Location/Qualifiers
source 1. .4926
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

ORIGIN

Query Match 100.0%; Score 524; DB 6; Length 4926;
Best Local Similarity 100.0%; Pred. No. 5.9e-131;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
      |||
Db      16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy      61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
      |||
Db      76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy     121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
      |||
Db     136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195

Qy     181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
      |||
Db     196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 255

Qy     241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
      |||
Db     256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315

Qy     301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
      |||
Db     316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375

Qy     361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
      |||
Db     376 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435

Qy     421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
      |||
Db     436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA 495

Qy     481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db     496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539
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RESULT 7

BD000501

LOCUS BD000501 1507 bp DNA linear PAT 31-JAN-2002

DEFINITION Process for producing monoclonal antibody.

ACCESSION BD000501

VERSION BD000501.1 GI:18623614
 KEYWORDS JP 2000342279-A/1.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1507)
 AUTHORS Kusunoki, C. and Fukushima, A.
 TITLE Process for producing monoclonal antibody
 JOURNAL Patent: JP 2000342279-A 1 12-DEC-2000;
 JAPAN TOBACCO INC, ABGENIX INC
 COMMENT OS Homo sapiens (human)
 PN JP 2000342279-A/1
 PD 12-DEC-2000
 PF 30-MAR-2000 JP 2000097874
 PR
 PI CHIHIRO KUSUNOKI, ATSUSHI FUKUSHIMA
 PC C12N15/09, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12N15/02, PC
 C12P21/08//
 PC C07K16/18, C12N15/00, C12N5/00, C12N15/00
 CC
 FH Key Location/Qualifiers
 FT CDS (12)..(1400).
 FEATURES Location/Qualifiers
 source 1..1507
 /organism="Homo sapiens"
 /mol_type="genomic DNA"
 /db_xref="taxon:9606"

ORIGIN

Query Match 83.4%; Score 436.8; DB 6; Length 1507;
 Best Local Similarity 91.7%; Pred. No. 2.5e-107;
 Matches 475; Conservative 0; Mismatches 37; Indels 6; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAG	72
Db	12	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG	71
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	72	GTTTCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	131
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	132	TGCGCTGTCTATGGTGGGTCTTCAGTGGTTACTACTGGACCTGGATCCGCCAGCCCCCA	191
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG	252
Db	192	GGGAAGGGGCTGGAGTGGATTGGGGAAATCATTCATCATGGAAACACCAACTACAACCCG	251
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	252	TCCCTCAAGAGTCGAGTCTCCATATCAGTTGACACGTCCAAGAACCAGTTCTCCCTGACA	311
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGA-----GAGTAATT	366
Db	312	CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGGGGAGCAGTG	371

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Qy      367 AATTGGTTTCGACCCTTGGGGCCAGGGAACCTGGTCACCGTCTCCTCAGCCTCAACCAAG 426  
          |   |||   |||       ||||||||| | | | | | | | | | | | | | | |  
Db      372 GCTGCGTTTTGACTACTGGGGCCAGGGAACCTGGTCACCGTCTCCTCAGCCTCCACCAAG 431  
  
Qy      427 GGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCC 486  
          ||| ||||| | | | | | | | | | | | | | | | | | | | | | | | | | |  
Db      432 GGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGCGGCC 491  
  
Qy      487 CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524  
          ||| ||||| | | | | | | | | | | | | | | | | | | | | | | | | | |  
Db      492 CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 529
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RESULT 8

BC073766

LOCUS BC073766 1581 bp mRNA linear PRI 30-JUN-2004

DEFINITION Homo sapiens cDNA clone MGC:88774 IMAGE:4855124, complete cds.

ACCESSION BC073766

VERSION BC073766.1 GI:49256426

KEYWORDS MGC.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1581)

AUTHORS Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
Fahey,J., Helton,E., Kettelman,M., Madan,A., Rodrigues,S.,
Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.

TITLE	Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
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JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)

PUBMED 12477932

REFERENCE 2 (bases 1 to 1581)

AUTHORS Strausberg, R.

TITLE Direct Submission

JOURNAL Submitted (23-JUN-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

REMARK NIH-MGC Project URL: <http://mgc.nci.nih.gov>

COMMENT Contact: MGC help desk

FEATURES	Location/Qualifiers
source	1. .1634 /organism="Homo sapiens" /mol_type="genomic DNA" /db_xref="taxon:9606"

Query Match 76.1%; Score 399; DB 6; Length 1634;
Best Local Similarity 86.3%; Pred. No. 4.3e-97;
Matches 460; Conservative 0; Mismatches 55; Indels 18; Gaps 1;

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RESULT 10
A49389
LOCUS      A49389              1418 bp      DNA      linear      PAT 07-MAR-1997
DEFINITION Sequence 7 from Patent WO9607740.
ACCESSION  A49389

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VERSION A49389.1 GI:2302866
 KEYWORDS .
 SOURCE unidentified
 ORGANISM unidentified
 unclassified.
 REFERENCE 1 (bases 1 to 1418)
 AUTHORS Edelman,L., Margaritte,C., Kaczorek,M. and Chaabihi,H.
 TITLE MONOCLONAL RECOMBINANT ANTI-RHESUS D (D7C2) ANTIBODY
 JOURNAL Patent: WO 9607740-A 7 14-MAR-1996;
 PASTEUR INSTITUT (FR)
 COMMENT Other publication FR 2724182 960308.
 FEATURES Location/Qualifiers
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 /organism="unidentified"
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 GTQTYICNVNHKPSNTKVDKKAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTL
 MISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLKVL
 HQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC
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 mat_peptide 58. .1418
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ORIGIN

Query Match 75.8%; Score 397.2; DB 6; Length 1418;
 Best Local Similarity 87.2%; Pred. No. 1.3e-96;
 Matches 457; Conservative 0; Mismatches 43; Indels 24; Gaps 1;

Qy	25	TGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAGGTGCAGCTACAG	84
Db	13	TGTATCATCTCTTCTTGGTAGCAACAGCTACAGGTGTCCACTCCCAGGTCCAAGTGCAG	72
Qy	85	CAGTGGGGCGCAGGACTGTTGAAGCCTTCGAGACCCTGTCCCTCACCTGCGCTGTCTAT	144
Db	73	CAGTGGGGCGCAGGACTGTTGAAGCCTTCGAGACCCTGTCCCTCACCTGCACTGTCTAT	132
Qy	145	GGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCAGGTAAGGGTCTG	204
Db	133	GGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCAGGGAAGGGGCTG	192
Qy	205	GAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCGTCTCTCAAGAGT	264
Db	193	GAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCGTCCCTCAAGAGT	252
Qy	265	CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAACTGAGCTCTGTG	324

Db 253 CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAACTCTGTG 312

Qy 325 ACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
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Db 313 ACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGGGCCCCAGAGTATAAATGGAAGTAT 372

Qy 362 -TAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
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Db 373 CATGGGGACTGGTTCGACCCCTGGGGCCAAGGTACCACTGTACCGTCTCCTCAGCCTCC 432

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
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Db 433 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 492

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db 493 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 11

AR176296

LOCUS AR176296 1418 bp DNA linear PAT 17-DEC-2001

DEFINITION Sequence 7 from patent US 6312690.

ACCESSION AR176296

VERSION AR176296.1 GI:17918651

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 1418)

AUTHORS Edelman,L., Margaritte,C., Kaczorek,M. and Chaabihi,H.

TITLE Monoclonal recombinant anti-rhesus D (D7C2) antibody

JOURNAL Patent: US 6312690-A 7 06-NOV-2001;

FEATURES Location/Qualifiers

source 1..1418

/organism="unknown"

/mol_type="unassigned DNA"

ORIGIN

Query Match 75.5%; Score 395.6; DB 6; Length 1418;

Best Local Similarity 87.0%; Pred. No. 3.6e-96;

Matches 456; Conservative 0; Mismatches 44; Indels 24; Gaps 1;

Qy 25 TGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAGGTGCAGCTACAG 84
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Db 13 TGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTGTCCACTCCCAGGTCCAAGTGGAG 72

Qy 85 CAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTAT 144
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Db 73 CAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTAT 132

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Db 133 GGTGGGTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCAGGGAAGGGGCTG 192

Qy 205 GAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCTCTCAAGAGT 264
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Qy 265 CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAACTGAGCTCTGTG 324
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Db 253 CGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAACTCTGTG 312

Qy 325 ACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
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Db 313 ACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGGGCCCCAGAGTATAAATGGAAGTAT 372

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Db 433 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCTCCAAGAGCACCTCTGGGGGCACA 492

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Db 493 GCGGCCCTGGGCTGCC'TGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 12

AR135359

LOCUS AR135359 1567 bp DNA linear PAT 16-JUN-2001

DEFINITION Sequence 17 from patent US 6135941.

ACCESSION AR135359

VERSION AR135359.1 GI:14476031

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 1567)

AUTHORS Hillman,J.L., Lal,P., Tang,Y.Tom., Yue,H., Au-Young,J.,
 Corley,N.C., Guegler,K.J. and Baughn,M.R.

TITLE Human immune system associated molecules

JOURNAL Patent: US 6135941-A 17 24-OCT-2000;

FEATURES Location/Qualifiers

source 1..1567

/organism="unknown"

/mol_type="unassigned DNA"

ORIGIN

Query Match 75.0%; Score 392.8; DB 6; Length 1567;

Best Local Similarity 86.3%; Pred. No. 2.1e-95;

Matches 468; Conservative 0; Mismatches 47; Indels 27; Gaps 2;

Qy 10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
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Qy 130 ACCTGCGCTGTCTATGGTGGTTCCTTCA-----GTGGTTACTACTGGAGCTGGATCCGC 183


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Db    195 ACCTGCGCTGTCTCTGGTGGCTCCATCACTAGTGGTGGTTACTACTGGAGCTGGATCCGC 254
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Qy    184 CAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAAC 243
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Qy    244 TACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTC 303
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Db    315 TACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTAGACACGTCCAAGAACCAGTTC 374
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Qy    304 TCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA--- 360
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Qy    361 -----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGGTC 402
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Qy    403 ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG 462
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Qy    463 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 522
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Db    555 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 614
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Qy    523 GT 524
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Db    615 GT 616

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RESULT 13

BC075842

LOCUS BC075842 1599 bp mRNA linear PRI 07-JUL-2004

DEFINITION Homo sapiens immunoglobulin heavy constant gamma 1 (G1m marker), mRNA (cDNA clone MGC:88778 IMAGE:6215815), complete cds.

ACCESSION BC075842

VERSION BC075842.1 GI:49904193

KEYWORDS MGC.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1599)

AUTHORS Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K., Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F., Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L., Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L., Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S., Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J., Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J., McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S., Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,

Fahey, J., Helton, E., Kettelman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnierch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

TITLE Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)

PUBMED 12477932

REFERENCE 2 (bases 1 to 1599)

AUTHORS Strausberg, R.

TITLE Direct Submission

JOURNAL Submitted (06-JUL-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

REMARK NIH-MGC Project URL: <http://mgc.nci.nih.gov>

COMMENT Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Mark Watson
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305
Web site: <http://www-shgc.stanford.edu>
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriguez, A., and Myers, R. M.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Series: IRAL Plate: 58 Row: j Column: 19
This clone was selected for full length sequencing because it passed the following selection criteria: GenomeScan gene prediction, Similarity but not identity to protein.

FEATURES Location/Qualifiers

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/clone_lib="NIH_MGC_113"
/lab_host="DH10B-R"
/note="Vector: pOTB7"

gene 1..1599
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/db_xref="IMGT/LIGM:IGHG1"
/db_xref="LocusID:3500"
/db_xref="MIM:147100"

CDS 23..1432
/gene="IGHG1"
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/protein_id="AAH75842.1"
/db_xref="GI:49904194"

LOCUS AF245309 476 bp mRNA linear PRI 15-MAR-2001
 DEFINITION Homo sapiens IgG1 immunoglobulin heavy chain variable region mRNA, partial cds.
 ACCESSION AF245309
 VERSION AF245309.2 GI:13347044
 KEYWORDS .
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 476)
 AUTHORS Ottensmeier, C.H. and Stevenson, F.K.
 TITLE Isotype switch variants reveal clonally related subpopulations in diffuse large B-cell lymphoma
 JOURNAL Blood 96 (7), 2550-2556 (2000)
 MEDLINE 20458802
 PUBMED 11001910
 REFERENCE 2 (bases 1 to 476)
 AUTHORS Ottensmeier, C.H. and Stevenson, F.K.
 TITLE Direct Submission
 JOURNAL Submitted (15-MAR-2000) Molecular Immunology, Cancer Sciences Division, Southampton University, Tremona Road, Southampton SO16 6YD, UK
 COMMENT On Mar 15, 2001 this sequence version replaced gi:13123497.
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ORIGIN

Query Match 73.7%; Score 386.2; DB 9; Length 476;
 Best Local Similarity 91.5%; Pred. No. 1.3e-93;
 Matches 422; Conservative 0; Mismatches 33; Indels 6; Gaps 1;

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
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 Db 1 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCGC 60
 Qy 130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
 |||||
 Db 61 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTGACTACTGGAGCTGGATTGCCAGCCC 120
 Qy 190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
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 Db 121 CCAGGGAAGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGTACCAACTACAAC 180

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_23Sep04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
3: geneseqn2000s:*
4: geneseqn2001as:*
5: geneseqn2001bs:*
6: geneseqn2002as:*
7: geneseqn2002bs:*
8: geneseqn2003as:*
9: geneseqn2003bs:*
10: geneseqn2003cs:*
11: geneseqn2003ds:*
12: geneseqn2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	%		DB	ID	Description
		Query	Match Length			
1	524	100.0	524	2	AAT73444	Aat73444 Human imm
2	524	100.0	524	2	AAV39292	Aav39292 Synthetic
3	524	100.0	524	2	AAZ22046	Aaz22046 Nucleotid
4	524	100.0	4926	2	AAV39291	Aav39291 Plasmid p
5	524	100.0	4926	2	AAZ22045	Aaz22045 Nucleotid
6	436.8	83.4	1507	3	AAA09695	Aaa09695 Human imm
7	407.2	77.7	1401	10	ADE28478	Ade28478 Human ant
8	405.6	77.4	629	6	ABQ56276	Abq56276 Human ova
9	404	77.1	1401	10	ADE28470	Ade28470 Human ant
10	399	76.1	1634	3	AAZ50012	Aaz50012 Human imm
11	397.6	75.9	1401	10	ADE28418	Ade28418 Human ant
12	397.2	75.8	1418	2	AAT26889	Aat26889 Anti-rhes
13	396.8	75.7	1838	10	ADF90705	Adf90705 Human hep
14	392.8	75.0	1567	4	AAC66522	Aac66522 Human imm
15	392.4	74.9	1395	10	ADE28410	Ade28410 Human ant
16	385.2	73.5	669	10	ADJ32111	Adj32111 Human int
17	385.2	73.5	2674	8	ABX15391	Abx15391 Human IgG
18	383.8	73.2	403	2	AAT73440	Aat73440 Human imm
19	383.8	73.2	403	2	AAV39238	Aav39238 Functiona
20	380.4	72.6	2674	10	AAD59472	Aad59472 RecPolRhD
21	376.8	71.9	404	2	AAT73438	Aat73438 Human imm
22	376.8	71.9	404	2	AAV39236	Aav39236 Functiona
23	376.8	71.9	404	2	AAZ21990	Aaz21990 Partial n
c 24	376.6	71.9	2166	12	ADF69266	Adf69266 Human lun
25	369.8	70.6	401	2	AAZ21992	Aaz21992 Partial n
26	367.8	70.2	687	10	ADJ32127	Adj32127 Human int
27	366.2	69.9	1431	2	AAT18059	Aat18059 Monoclonal
28	365.8	69.8	690	10	ADJ32117	Adj32117 Human int
29	365.6	69.8	462	8	ABZ80006	Abz80006 Human ant
30	363.6	69.4	829	2	AAV87732	Aav87732 EST clone

31	361.4	69.0	1765	2	AAQ71873	Aaq71873 Sequence
32	357.2	68.2	496	2	AAZ24416	Aaz24416 Human bla
33	355.6	67.9	663	10	ADJ32125	Adj32125 Human int
34	354.8	67.7	1431	2	AAT62513	Aat62513 Primatise
35	354.8	67.7	1431	2	AAV35489	Aav35489 Macaque p
36	354.8	67.7	1431	6	AAS17247	Aas17247 DNA seque
37	354.8	67.7	1431	10	AAD56531	Aad56531 Monkey 16
38	353.4	67.4	1539	6	ABK34949	Abk34949 Human cDN
39	352.2	67.2	7528	4	AAF30316	Aaf30316 Bicistron
40	342.4	65.3	1404	2	AAT62868	Aat62868 Human gam
41	342.4	65.3	1404	10	ADE31588	Ade31588 Gamma 4 h
42	342	65.3	1431	2	AAT62510	Aat62510 Primatise
43	342	65.3	1431	2	AAV35485	Aav35485 Macaque p
44	342	65.3	1431	6	AAS17243	Aas17243 DNA seque
45	342	65.3	1431	10	AAD56527	Aad56527 Monkey 7C

ALIGNMENTS

RESULT 1

AAT73444

ID AAT73444 standard; DNA; 524 BP.

XX

AC AAT73444;

XX

DT 03-DEC-1997 (first entry)

XX

DE Human immunoglobulin light chain variable region partial transcript.

XX

KW Ig; affinity constant; human; antigen; hybridoma; B cell; transgene;

KW transgenic; mouse; CD4; antibody; autoimmune; inflammatory;

KW transplant rejection; ss.

XX

OS Homo sapiens.

XX

PN W09713852-A1.

XX

PD 17-APR-1997.

XX

PF 10-OCT-1996; 96WO-US016433.

XX

PR 10-OCT-1995; 95US-00544404.

XX

PA (GENP-) GENPHARM INT INC.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1997-235888/21.

XX

PT Novel anti-CD4 antibody produced by transgenic mice - used in the

PT treatment of auto-immune disease etc.

XX

PS Claim 45; Page 272; 396pp; English.

XX

CC A novel composition has been developed which comprises an immunoglobulin

CC (Ig) having an affinity constant (Ka) of at least 2 multiply 1000000000 M

CC -1 for binding to a predetermined human antigen. The present sequence
 CC represents a human light chain variable region partial nucleotide
 CC sequence, HC6G5, which encodes an amino acid sequence from a claimed
 CC immunoglobulin that specifically binds human CD4. The anti-CD4 antibodies
 CC may be used in therapeutic and diagnostic applications, especially for
 CC the treatment of human diseases. These antibodies reduce activity of CD4
 CC cells and reduce undesirable autoimmune reactions, inflammatory response
 CC and transplant rejection. Transgenic animals are capable of producing
 CC heterologous antibodies of multiple isotypes by undergoing isotype
 CC switching. These animals produce a first Ig type that is necessary for
 CC antigen-stimulated B-cell maturation and can switch to encode and produce
 CC one or more subsequent heterologous isotypes

XX

SQ Sequence 524 BP; 106 A; 160 C; 140 G; 118 T; 0 U; 0 Other;

Query Match 100.0%; Score 524; DB 2; Length 524;
 Best Local Similarity 100.0%; Pred. No. 7.7e-132;
 Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG	60
Db	1	AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG	60
Qy	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Db	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC	240
Db	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC	240
Qy	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Db	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Qy	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Db	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Qy	361	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA	420
Db	361	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA	420
Qy	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Db	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Qy	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524

RESULT 2

AAV39292

ID AAV39292 standard; DNA; 524 BP.

XX

AC AAV39292;

XX

DT 18-DEC-1998 (first entry)

XX

DE Synthetic heavy chain sequence HC6G5.

XX

KW Transgenic animal; human heterologous antibody; transgene;

KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;

KW autoimmune reaction; inflammatory response; transplant rejection;

KW acid induced lung injury; acute adult respiratory distress syndrome;

KW ARDS; vasculitis; septic shock; allergic reaction; asthma;

KW cystic fibrosis; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9824884-A1.

XX

PD 11-JUN-1998.

XX

PF 01-DEC-1997; 97WO-US021803.

XX

PR 02-DEC-1996; 96US-00758417.

XX

PA (GENP-) GENPHARM INT.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1998-333306/29.

XX

PT Hybridoma producing antibody specific for interleukin-8 - used to prevent

PT efflux of neutrophils from vasculature, and treat reperfusion injury.

XX

PS Example 42; Page 324; 452pp; English.

XX

CC The present sequence represents a synthetic heavy sequence (created using

CC oligonucleotides AAV39279-89). This synthetic sequence differs from

CC natural sequences in that strings of repeated oligonucleotides are

CC interrupted (to facilitate oligonucleotide synthesis and PCR

CC amplification), optimal translation initiation sites are incorporated and

CC HindII sites were engineered upstream of the translation initiation

CC sites. The sequence is used to make plasmid pHC6G5, which is used in the

CC construction of minigenes for expression of IgGkappa anti-CD4 antibodies,

CC in the transgenic mouse of the invention. The specification describes

CC transgenic non-human animals, especially a mouse, which are capable of

CC producing a human heterologous antibodies of multiple isotypes by

CC undergoing isotype switching. The transgenic animals have human heavy and

CC light chain transgenes. The transgenes are capable of functionally

CC rearranging a heterologous diversity (D) gene in a variable-diversity-

CC junction (V-D-J) recombination. The transgenes include a heavy chain

CC transgene comprising at least one V, D and J gene segment, and one

CC constant region gene segment. The immunoglobulin (Ig) light chain

CC transgene comprises at least one V and J gene segment and one constant

CC region gene segment. The gene segments are heterologous to the transgenic

CC animal. The antibody can be used to prevent efflux of neutrophils from
CC vasculature. It can also be used to treat reperfusion injury. CD4 binding
CC antibodies are used to reduce undesirable autoimmune reactions,
CC inflammatory responses and rejection of transplanted organs. The anti-IL-
CC 8 antibodies can reduce tissue damage and prolong survival in animal
CC models of acute adult respiratory distress syndrome (ARDS) and acid
CC induced lung injury. The anti-IL-8 antibodies can also be used for the
CC treatment of vasculitis, septic shock, allergic reactions (e.g. asthma)
CC and cystic fibrosis

XX

SQ Sequence 524 BP; 106 A; 160 C; 140 G; 118 T; 0 U; 0 Other;

Query Match 100.0%; Score 524; DB 2; Length 524;
Best Local Similarity 100.0%; Pred. No. 7.7e-132;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
        |||
Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        |||
Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        |||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
        |||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
        |||
Db    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
        |||
Db    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
        |||
Db    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

Qy    421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
        |||
Db    421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy    481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        |||
Db    481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
```

RESULT 3

AAZ22046

ID AAZ22046 standard; DNA; 524 BP.

XX

AC AAZ22046;
 XX
 DT 24-NOV-1999 (first entry)
 XX
 DE Nucleotide sequence of HC6G5.
 XX
 KW Transgenic animal; heterologous antibody; hybridoma; B cell;
 KW transgenic mouse; human heavy chain transgene; digoxin;
 KW human light chain transgene; immortalized cell; immunoglobulin;
 KW Shinga-like toxin; autoimmune disease; cancer; infectious disease;
 KW transplant rejection; blood disorder; coagulation disorder; ss.
 XX
 OS Synthetic.
 XX
 PN WO9945962-A1.
 XX
 PD 16-SEP-1999.
 XX
 PF 12-MAR-1999; 99WO-US005535.
 XX
 PR 13-MAR-1998; 98US-00042353.
 XX
 PA (GENP-) GENPHARM INT INC.
 XX
 PI Lonberg N, Fishwild DM, Ball WJ;
 XX
 DR WPI; 1999-551219/46.
 XX
 PT Novel transgenic non-human animals used to produce heterologous
 PT antibodies.
 XX
 PS Example 42; Page 325; 484pp; English.
 XX
 CC The specification describes transgenic animals that are capable of
 CC producing a heterologous antibody. The antibodies are isolated from a
 CC hybridoma, comprising B cells, that is obtained from a transgenic mouse
 CC having a genome comprising a human heavy chain transgene and a human
 CC light chain transgene. The B cells are fused to immortalized cells
 CC suitable for generating a hybridoma, which produces a detectable amount
 CC of an immunoglobulin that specifically binds digoxin or Shinga-like
 CC toxin. B cells from transgenic animals can be used to generate hybridomas
 CC expressing monoclonal high affinity human sequence antibodies. Antibodies
 CC produced from the transgenic animals of the invention can be used to
 CC treat human diseases, e.g. autoimmune diseases, cancer, infectious
 CC disease, transplant rejection, blood disorders such as coagulation
 CC disorders and other diseases. The present sequence is used in the course
 CC of the invention
 XX
 SQ Sequence 524 BP; 106 A; 160 C; 140 G; 118 T; 0 U; 0 Other;

Query Match 100.0%; Score 524; DB 2; Length 524;
 Best Local Similarity 100.0%; Pred. No. 7.7e-132;
 Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
 |||||
 Db 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Db	61	GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC	120
Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC	240
Db	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC	240
Qy	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Db	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Qy	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Db	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Qy	361	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA	420
Db	361	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA	420
Qy	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Db	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Qy	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524

RESULT 4

AAV39291

ID AAV39291 standard; DNA; 4926 BP.

XX

AC AAV39291;

XX

DT 18-DEC-1998 (first entry)

XX

DE Plasmid pHG65 nucleotide sequence.

XX

KW Transgenic animal; human heterologous antibody; transgene;
 KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;
 KW autoimmune reaction; inflammatory response; transplant rejection;
 KW acid induced lung injury; acute adult respiratory distress syndrome;
 KW ARDS; vasculitis; septic shock; allergic reaction; asthma;
 KW cystic fibrosis; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN W09824884-A1.

XX

PD 11-JUN-1998.

XX
PF 01-DEC-1997; 97WO-US021803.
XX
PR 02-DEC-1996; 96US-00758417.
XX
PA (GENP-) GENPHARM INT.
XX
PI Lonberg N, Kay RM;
XX
DR WPI; 1998-333306/29.
XX
PT Hybridoma producing antibody specific for interleukin-8 - used to prevent
PT efflux of neutrophils from vasculature, and treat reperfusion injury.
XX
PS Example 42; Page 321-324; 452pp; English.
XX
CC The present sequence represents a plasmid, pHCG5, which contains a
CC synthetic heavy sequence (created using oligonucleotide AAV39267-89).
CC This synthetic sequence differs from natural sequences in that strings of
CC repeated oligonucleotides are interrupted (to facilitate oligonucleotide
CC synthesis and PCR amplification), optimal translation initiation sites
CC are incorporated and HindII sites were engineered upstream of the
CC translation initiation sites. The plasmid is used in the construction of
CC minigenes for expression of IgGkappa anti-CD4 antibodies, in the
CC transgenic mouse of the invention. The specification describes transgenic
CC non-human animals, especially a mouse, which are capable of producing a
CC human heterologous antibodies of multiple isotypes by undergoing isotype
CC switching. The transgenic animals have human heavy and light chain
CC transgenes. The transgenes are capable of functionally rearranging a
CC heterologous diversity (D) gene in a variable-diversity-junction (V-D-J)
CC recombination. The transgenes include a heavy chain transgene comprising
CC at least one V, D and J gene segment, and one constant region gene
CC segment. The immunoglobulin (Ig) light chain transgene comprises at least
CC one V and J gene segment and one constant region gene segment. The gene
CC segments are heterologous to the transgenic animal. The antibody can be
CC used to prevent efflux of neutrophils from vasculature. It can also be
CC used to treat reperfusion injury. CD4 binding antibodies are used to
CC reduce undesirable autoimmune reactions, inflammatory responses and
CC rejection of transplanted organs. The anti-IL-8 antibodies can reduce
CC tissue damage and prolong survival in animal models of acute adult
CC respiratory distress syndrome (ARDS) and acid induced lung injury. The
CC anti-IL-8 antibodies can also be used for the treatment of vasculitis,
CC septic shock, allergic reactions (e.g. asthma) and cystic fibrosis
XX
SQ Sequence 4926 BP; 1121 A; 1455 C; 1296 G; 1054 T; 0 U; 0 Other;

Query Match 100.0%; Score 524; DB 2; Length 4926;
Best Local Similarity 100.0%; Pred. No. 1.4e-131;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy 61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy	121	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	180
Db	136	CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC	195
Qy	181	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	240
Db	196	CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC	255
Qy	241	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	300
Db	256	AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG	315
Qy	301	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	360
Db	316	TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA	375
Qy	361	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA	420
Db	376	GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA	435
Qy	421	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA	480
Db	436	ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA	495
Qy	481	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	496	GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	539

RESULT 5

AAZ22045

ID AAZ22045 standard; DNA; 4926 BP.

XX

AC AAZ22045;

XX

DT 24-NOV-1999 (first entry)

XX

DE Nucleotide sequence of plasmid pHC6G5.

XX

KW Transgenic animal; heterologous antibody; hybridoma; B cell;

KW transgenic mouse; human heavy chain transgene; digoxin;

KW human light chain transgene; immortalized cell; immunoglobulin;

KW Shinga-like toxin; autoimmune disease; cancer; infectious disease;

KW transplant rejection; blood disorder; coagulation disorder; ss.

XX

OS Synthetic.

XX

PN WO9945962-A1.

XX

PD 16-SEP-1999.

XX

PF 12-MAR-1999; 99WO-US005535.

XX

PR 13-MAR-1998; 98US-00042353.

XX

PA (GENP-) GENPHARM INT INC.

Db 376 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||

Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||

Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539

RESULT 6

AAA09695

ID AAA09695 standard; cDNA; 1507 BP.

XX

AC AAA09695;

XX

DT 01-FEB-2001 (first entry)

XX

DE Human immunoglobulin heavy chain cDNA sequence.

XX

KW Monoclonal antibody; immunoglobulin heavy chain; human; ss.

XX

OS Homo sapiens.

XX

PN WO200058499-A1.

XX

PD 05-OCT-2000.

XX

PF 30-MAR-2000; 2000WO-JP002022.

XX

PR 30-MAR-1999; 99JP-00087929.

XX

PA (NISB) JAPAN TOBACCO INC.

PA (ABGE-) ABGENIX INC.

XX

PI Kusunoki C, Fukushima A;

XX

DR WPI; 2000-611721/58.

DR P-PSDB; AAB26884.

XX

PT Transformation of a hybridoma with a gene encoding an immunoglobulin heavy chain polypeptide for enhanced production of monoclonal antibody.

XX

PS Example 2; Page 35-39; 48pp; Japanese.

XX

CC This invention relates to a method for the production of a monoclonal antibody. The antibody is produced by inserting a gene encoding an immunoglobulin heavy chain polypeptide into cells which produce a monoclonal antibody recognizing the immunoglobulin, and culturing the transformant to express the antibody. The invention also includes monoclonal antibody-expressing cells transformed by the method; and transgenic non-human animals containing the cells and expressing a human antibody. The method results in the enhanced expression of a monoclonal antibody for diagnostic and therapeutic use. The present sequence represents a human immunoglobulin heavy chain cDNA sequence used in an example of the method of the invention

XX

SQ Sequence 1507 BP; 330 A; 498 C; 409 G; 270 T; 0 U; 0 Other;

Query Match 83.4%; Score 436.8; DB 3; Length 1507;
Best Local Similarity 91.7%; Pred. No. 4.2e-108;
Matches 475; Conservative 0; Mismatches 37; Indels 6; Gaps 1;

```
Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      12 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 71

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      72 GTTCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 131

Qy     133 TGCCTGTCTATGGTGGTTCTTCCTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     132 TGCCTGTCTATGGTGGGTCCTTCAGTGGTTACTACTGGACCTGGATCCGCCAGCCCCCA 191

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        || ||||| |||||||||||||||||| ||||| ||||| ||||||||||||||||
Db     192 GGGAAGGGGCTGGAGTGGATTGGGGAAATCATTCATCATGAAACACCAACTACAACCCG 251

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        || |||||||||||||| |||||||||||||| |||||||||||||| ||||| |
Db     252 TCCCTCAAGAGTCGAGTCTCCATATCAGTTGACACGTCCAAGAACCAGTTCTCCCTGACA 311

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGA-----GAGTAATT 366
        |||||||||||||| |||||||||||||| |||||||||||||| ||||| |
Db     312 CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGGGGAGCAGTG 371

Qy     367 AATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCAACCAAG 426
        | ||| ||| |||||||||||||||||| |||||||||||||| ||||||||
Db     372 GCTGCGTTTGACTACTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCCACCAAG 431

Qy     427 GGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCC 486
        |||||||||||||| |||||| |||| ||||| ||||| ||||| ||||| |||||
Db     432 GGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGCGGCC 491

Qy     487 CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        |||||||||||||| |||||||||||||| ||||||||
Db     492 CTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 529
```

RESULT 7

ADE28478

ID ADE28478 standard; cDNA; 1401 BP.

XX

AC ADE28478;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human anti-CD40 antibody 24-2-1 full length heavy chain cDNA.

XX

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;

KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;

KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;

KW human; heavy chain; ss; gene; 24-2-1.
 XX
 OS Homo sapiens.
 XX
 PN WO2003040170-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 08-NOV-2002; 2002WO-US036107.
 XX
 PR 09-NOV-2001; 2001US-0348980P.
 XX
 PA (PFIZ) PFIZER PROD INC.
 PA (ABGE-) ABGENIX INC.
 XX
 PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
 XX
 DR WPI; 2003-441521/41.
 DR P-PSDB; ADE28479.
 XX
 PT New chimeric or human monoclonal antibody or its antigen-binding portion
 PT that specifically binds to and activates human CD40, useful for enhancing
 PT an immune response in a human, or treating cancer, HIV, neutropenia or
 PT viral infections.
 XX
 PS Claim 24; SEQ ID NO 85; 177pp; English.
 XX
 CC The invention relates to a novel chimeric or human monoclonal antibody or
 CC its antigen-binding portion that specifically binds to and activates
 CC human CD40. The anti-CD40 antibody of the invention demonstrates
 CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
 CC activities and may be useful for treating a hyperproliferative disorder
 CC such as cancer, viral and bacterial infection or genetic, primary or
 CC combined immunodeficiency conditions including neutropenia or HIV
 CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
 CC in a biological sample in vitro or in vivo, as well as during gene
 CC therapy procedures. The current sequence is that of the human anti-CD40
 CC antibody full length heavy chain cDNA of the invention.
 XX
 SQ Sequence 1401 BP; 310 A; 460 C; 382 G; 249 T; 0 U; 0 Other;

Query Match 77.7%; Score 407.2; DB 10; Length 1401;
Best Local Similarity 87.5%; Pred. No. 4.3e-100;
Matches 464; Conservative 0; Mismatches 48; Indels 18; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCGTCTCAG	72
Db	1	ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCC	120
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGAGGTTACTACTGGAGCTGGATCCGGCAGCCCCCA	180

Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG	252
Db	181	GGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG	300
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA-----	360
Db	301	CTGAGTTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAAGGGGGGCCTC	360
Qy	361	-----GTAATTAAT'TGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA	414
Db	361	TACGGTGACTACGGCTGGTTCGCCCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA	420
Qy	415	GCCTCAACCAAGGGGCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG	474
Db	421	GCCTCCACCAAGGGGCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG	480
Qy	475	GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	530

PA (HUMA-) HUMAN GENOME SCI INC.

XX
PA (PFIZ) PFIZER PROD INC.
PA (ABGE-) ABGENIX INC.
XX
PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
XX
DR WPI; 2003-441521/41.
DR P-PSDB; ADE28471.
XX
PT New chimeric or human monoclonal antibody or its antigen-binding portion
PT that specifically binds to and activates human CD40, useful for enhancing
PT an immune response in a human, or treating cancer, HIV, neutropenia or
PT viral infections.
XX
PS Claim 24; SEQ ID NO 77; 177pp; English.
XX
CC The invention relates to a novel chimeric or human monoclonal antibody or
CC its antigen-binding portion that specifically binds to and activates
CC human CD40. The anti-CD40 antibody of the invention demonstrates
CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
CC activities and may be useful for treating a hyperproliferative disorder
CC such as cancer, viral and bacterial infection or genetic, primary or
CC combined immunodeficiency conditions including neutropenia or HIV
CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
CC in a biological sample in vitro or in vivo, as well as during gene
CC therapy procedures. The current sequence is that of the human anti-CD40
CC antibody full length heavy chain cDNA of the invention.
XX
SQ Sequence 1401 BP; 311 A; 460 C; 380 G; 250 T; 0 U; 0 Other;

Query Match 77.1%; Score 404; DB 10; Length 1401;
Best Local Similarity 87.2%; Pred. No. 3.1e-99;
Matches 462; Conservative 0; Mismatches 50; Indels 18; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCCTGTCTCAG	72
Db	1	ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCCTGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC	120
Qy	133	TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGAGGTTACTACTGGAGCTGGATCCGGCAGCCCCCT	180
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG	252
Db	181	GGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG	300
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA-----	360
Db	301	CTGAACCTCTGTGACCGCTGCGGACACGGCCGTGTATTATTGTGCGAGAAAGGGGGGCCCTC	360

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Qy      361 -----GTAATTAATTGGTTCGACCCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA 414
          |          ||||| ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 TACGGTGACTACGGCTGGTTCGCCCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA 420

Qy      415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG 474
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480

Qy      475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

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RESULT 10

AAZ50012

ID AAZ50012 standard; cDNA; 1634 BP.

XX

AC AAZ50012;

XX

DT 25-APR-2000 (first entry)

XX

DE Human immune system molecule, ISMO-2 cDNA.

XX

KW Human; immune system molecule; ISMO-2; Incyte clone 2849752; diagnosis;

KW treatment; prevention; cell proliferation; immune system disorder; ss.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT CDS 78..1490

FT /*tag= a

FT /product= "ISMO-2"

FT /note= "ISMO-2 shows homology to vertebrate

FT immunoglobulin gamma heavy-chain"

FT sig_peptide 78..134

FT /*tag= b

FT mat_peptide 135..1487

FT /*tag= c

FT /product= "Mature ISMO-2 protein"

FT misc_binding 432..473

FT /*tag= d

FT /bound_moiety= "Hybridisation probe"

XX

PN WO200000608-A2.

XX

PD 06-JAN-2000.

XX

PF 21-JUN-1999; 99WO-US013995.

XX

PR 30-JUN-1998; 98US-00107223.

XX

PA (INCY-) INCYTE PHARM INC.

XX

PI Lal P, Tang YT, Corley NC, Gorgone G, Guegler KJ, Patterson C;

PI Baughn MR;

XX

DR WPI; 2000-170916/15.
 DR P-PSDB; AAY44721.
 XX
 PT Immune system molecules used in the diagnosis, treatment and prevention
 PT of disorders associated with the immune system and cell proliferation.
 XX
 PS Claim 7; Page 64-65; 69pp; English.
 XX
 CC The present sequence is a cDNA encoding an immune system molecule, ISMO-2
 CC from an Incyte clone 2849752 isolated from the human breast tumour cDNA
 CC library (BRSTTUT13). This sequence is expressed in several libraries,
 CC generally those associated with cancer, cell proliferation, immune
 CC response or trauma. The present sequence is useful in the diagnosis,
 CC treatment and prevention of disorders associated with the immune system
 CC and cell proliferation
 XX
 SQ Sequence 1634 BP; 369 A; 541 C; 432 G; 292 T; 0 U; 0 Other;

Query Match 76.1%; Score 399; DB 3; Length 1634;
 Best Local Similarity 86.3%; Pred. No. 7.4e-98;
 Matches 460; Conservative 0; Mismatches 55; Indels 18; Gaps 1;

Qy	10	ACCATGAAACACCTGTGGTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTCTGTCT	69
Db	75	AACATGAAACATCTGTGGTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTCTGTCC	134
Qy	70	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	129
Db	135	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTC	194
Qy	130	ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTTACTACTGGAGCTGGATCCGCCAGCCA	189
Db	195	ACCTGCACTGTCTCTGGTGGCTCCATCAGGAGTTACTACTGGAAGTGGATCCGGCTGCCC	254
Qy	190	CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC	249
Db	255	CCAGGGAAGGGACTGGAGTGGATTGGGTATATCTATACTAGTGGGAGCACCAACTACAAC	314
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	315	CCCTCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTG	374
Qy	310	AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA-----	360
Db	375	AAGCTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGACCCCCGCCC	434
Qy	361	-----GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCC	411
Db	435	AACGCTACTACTACTACGGTATGGACTTCTGGGGCCAAGGGAGCCCTGGTCACCGTCTCC	494
Qy	412	TCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT	471
Db	495	TCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT	554
Qy	472	GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	555	GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	607

RESULT 11

ADE28418

ID ADE28418 standard; cDNA; 1401 BP.

XX

AC ADE28418;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human anti-CD40 antibody 15-1-1 variable region heavy chain cDNA.

XX

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;

KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;

KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;

KW human; variable region heavy chain; ss; gene; 15-1-1.

XX

OS Homo sapiens.

XX

PN WO2003040170-A2.

XX

PD 15-MAY-2003.

XX

PF 08-NOV-2002; 2002WO-US036107.

XX

PR 09-NOV-2001; 2001US-0348980P.

XX

PA (PFIZ) PFIZER PROD INC.

PA (ABGE-) ABGENIX INC.

XX

PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;

XX

DR WPI; 2003-441521/41.

DR P-PSDB; ADE28419.

XX

PT New chimeric or human monoclonal antibody or its antigen-binding portion
PT that specifically binds to and activates human CD40, useful for enhancing
PT an immune response in a human, or treating cancer, HIV, neutropenia or
PT viral infections.

XX

PS Claim 24; SEQ ID NO 25; 177pp; English.

XX

CC The invention relates to a novel chimeric or human monoclonal antibody or
CC its antigen-binding portion that specifically binds to and activates
CC human CD40. The anti-CD40 antibody of the invention demonstrates
CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
CC activities and may be useful for treating a hyperproliferative disorder
CC such as cancer, viral and bacterial infection or genetic, primary or
CC combined immunodeficiency conditions including neutropenia or HIV
CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
CC in a biological sample in vitro or in vivo, as well as during gene
CC therapy procedures. The current sequence is that of the human anti-CD40
CC antibody variable region heavy chain cDNA of the invention.

XX

SQ Sequence 1401 BP; 319 A; 452 C; 372 G; 258 T; 0 U; 0 Other;

Query Match

75.9%; Score 397.6; DB 10; Length 1401;

Best Local Similarity 86.4%; Pred. No. 1.7e-97;
Matches 458; Conservative 0; Mismatches 54; Indels 18; Gaps 1;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
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Db      1 ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db     121 TGCCTGTCTCTGGTGGCTCCATCAGAAGTTACTACTGGACCTGGATCCGGCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      |||
Db     181 GGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGCACCAACTACAATCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      |||
Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACATGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
      |||
Db     301 CTGAGTTCTGTGACCGCTGCGGACACGGCCGTTTATTACTGTGCGAGAAAGGGTGACTAC 360

Qy     361 -----GTAATTAATTGGTTTCGACCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 414
      |||
Db     361 GGTGGTAATTTTAACTACTTTTACCAGTGGGGCCAGGGAACCCTGGTACCGTCTCCTCA 420

Qy     415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGG 474
      |||
Db     421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480

Qy     475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db     481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

```

RESULT 12

AAT26889

ID AAT26889 standard; cDNA; 1418 BP.

XX

AC AAT26889;

XX

DT 30-OCT-1996 (first entry)

XX

DE Anti-rhesus D recombinant antibody D7C2 heavy chain cDNA.

XX

KW Human monoclonal antibody; immunoglobulin isotype IgM; agglutination;

KW rhesus positive; rhesus negative; haemolysis; heavy chain; gamma 1;

KW variable region; insect host cell; baculovirus; recombinant production;

KW ds.

XX

OS Homo sapiens.

OS Synthetic.

XX
FH Key Location/Qualifiers
FT sig_peptide 1. .57
FT /*tag= a
FT /note= "encoded by synthetic linker corresp. to mouse VH
FT gene signal sequence"
FT mat_peptide 58. .1416
FT /*tag= b
FT /product= "heavy_chain"
FT /note= "constructed from PCR fragments coding for human
FT gammal heavy chain constant region and the variable
FT region from anti-rhesus D antibody D7C2"
XX
PN FR2724182-A1.
XX
PD 08-MAR-1996.
XX
PF 02-SEP-1994; 94FR-00010566.
XX
PR 02-SEP-1994; 94FR-00010566.
XX
PA (INSP) INST PASTEUR.
PA (PROT-) PROTEINE PERFORMANCE.
XX
PI Edelman L, Margaritte C, Kaczorek M, Chaabihi H;
XX
DR WPI; 1996-162018/17.
DR P-PSDB; AAR93166.
XX
PT Recombinant anti-rhesus D monoclonal antibody - expressed by baculovirus-
PT transformed insect cells and useful for preventing haemolysis in new-born
PT babies.
XX
PS Claim 1; Page 35-37; 46pp; French.
XX
CC The human monoclonal antibody D7C2, of isotype IgM, recognises a 30-32 kD
CC polypeptide on the membrane of rhesus positive red blood cells. The
CC antibody agglutinates rhesus positive cells but not rhesus negative cells
CC and is useful diagnostically and also for preventing haemolysis in new-
CC born rhesus positive babies. Recombinant IgM-D7C2 can be produced by
CC insect cells which have been transformed by a baculoviral vector
CC comprising a D7C2 expression cassette. The present sequence encodes a
CC recombinant IgM-D7C2 heavy chain fused to a mouse VH signal peptide
XX
SQ Sequence 1418 BP; 333 A; 458 C; 378 G; 249 T; 0 U; 0 Other;

Query Match 75.8%; Score 397.2; DB 2; Length 1418;
Best Local Similarity 87.2%; Pred. No. 2.2e-97;
Matches 457; Conservative 0; Mismatches 43; Indels 24; Gaps 1;

QY 25 TGGTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTGTCTCAGGTGCAGCTACAG 84
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Db 13 TGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTGTCCACTCCCAGGTCCAACCTGCAG 72
QY 85 CAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTAT 144
||||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 73 CAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTAT 132

RESULT 14

AAC66522

ID AAC66522 standard; cDNA; 1567 BP.

XX

AC AAC66522;

XX

DT 15-FEB-2001 (first entry)

XX

DE Human immune system associated protein HISAP-4 coding sequence.

XX

KW Human; immune system associated protein; HISAP-4; immune disorder;

KW infection; autoimmune disease; cancer; ss.

XX

OS Homo sapiens.

XX

PN US6135941-A.

XX

PD 24-OCT-2000.

XX

PF 27-MAR-1998; 98US-00049672.

XX

PR 27-MAR-1998; 98US-00049672.

XX

PA (INCY-) INCYTE PHARM INC.

XX

PI Tang YT, Yue H, Lal P, Corley NC, Guegler KJ, Baughn MR;

PI Hillman JL, Au-Young J;

XX

DR WPI; 2001-030926/04.

DR P-PSDB; AAB36206.

XX

PT New human immune system associated proteins (HISAP) and polynucleotides

PT encoding the HISAP, useful for diagnosing, treating or preventing immune

PT or cell proliferative disorders or infections.

XX

PS Claim 3; Col 79-80; 54pp; English.

XX

CC The present invention provides the coding and protein sequences for a

CC number of human immune system associated proteins (HISAPs). These can be

CC used in the diagnosis and treatment of various autoimmune disorders,

CC infections and cell proliferation diseases. The diseases include AIDS,

CC adult respiratory distress syndrome, anaemia, asthma, atherosclerosis,

CC Crohn's disease, irritable bowel syndrome, multiple sclerosis, myasthenia

CC gravis, osteoarthritis, rheumatoid arthritis, scleroderma, systemic lupus

CC erythematosus, arteriosclerosis, cirrhosis and cancer

XX

SQ Sequence 1567 BP; 346 A; 503 C; 428 G; 289 T; 0 U; 1 Other;

Query Match 75.0%; Score 392.8; DB 4; Length 1567;

Best Local Similarity 86.3%; Pred. No. 3.5e-96;

Matches 468; Conservative 0; Mismatches 47; Indels 27; Gaps 2;

Qy 10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Db 75 AACATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 134

Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129

PF 08-NOV-2002; 2002WO-US036107.
 XX
 PR 09-NOV-2001; 2001US-0348980P.
 XX
 PA (PFIZ) PFIZER PROD INC.
 PA (ABGE-) ABGENIX INC.
 XX
 PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
 XX
 DR WPI; 2003-441521/41.
 DR P-PSDB; ADE28411.
 XX
 PT New chimeric or human monoclonal antibody or its antigen-binding portion
 PT that specifically binds to and activates human CD40, useful for enhancing
 PT an immune response in a human, or treating cancer, HIV, neutropenia or
 PT viral infections.
 XX
 PS Claim 24; SEQ ID NO 17; 177pp; English.
 XX
 CC The invention relates to a novel chimeric or human monoclonal antibody or
 CC its antigen-binding portion that specifically binds to and activates
 CC human CD40. The anti-CD40 antibody of the invention demonstrates
 CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
 CC activities and may be useful for treating a hyperproliferative disorder
 CC such as cancer, viral and bacterial infection or genetic, primary or
 CC combined immunodeficiency conditions including neutropenia or HIV
 CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
 CC in a biological sample in vitro or in vivo, as well as during gene
 CC therapy procedures. The current sequence is that of the human anti-CD40
 CC antibody variable region heavy chain cDNA of the invention.
 XX
 SQ Sequence 1395 BP; 310 A; 457 C; 382 G; 246 T; 0 U; 0 Other;

Query Match 74.9%; Score 392.4; DB 10; Length 1395;
 Best Local Similarity 86.1%; Pred. No. 4.3e-96;
 Matches 451; Conservative 0; Mismatches 61; Indels 12; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCGGTGGCAGCTCCTAGATGGGTCTGTCTCAG	72
Db	1	ATGAAACACCTGTGGTTCTTCCTCCTCGGTGGCAGCTCCCAGATGGGTCTGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC	120
Qy	133	TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGATCTGGATCCGGCAGCCCGCC	180
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG	252
Db	181	GGGAAGGGACTGGAATGGATTGGGCGTGTCTATACCAGTGGGAGCACCAACTACAACCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG	300

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Qy      313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATT-- 370
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Qy      371 -----GGTTCGACCCTTGGGGCCAGGGAACCTGGTCACCGTCTCCTCAGCCTCA 420
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Db      361 AGGGGGTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCAGCCTCC 420
          |||
Qy      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGGCACA 480
          |||
Db      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACA 480
          |||
Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          |||
Db      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          |||

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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	%		DB	ID	Description
		Query Match	Length			
1	524	100.0	524	3	US-09-042-353-419	Sequence 419, App
2	524	100.0	524	3	US-08-758-417A-219	Sequence 219, App
3	524	100.0	4926	3	US-09-042-353-418	Sequence 418, App
4	524	100.0	4926	3	US-08-758-417A-268	Sequence 268, App
5	395.6	75.5	1418	3	US-08-793-450-7	Sequence 7, Appli
6	392.8	75.0	1567	3	US-09-049-672A-17	Sequence 17, Appl
7	385.2	73.5	2674	4	US-09-372-425A-1	Sequence 1, Appli
8	383.8	73.2	403	3	US-09-042-353-357	Sequence 357, App
9	383.8	73.2	403	3	US-08-758-417A-205	Sequence 205, App
10	376.8	71.9	404	3	US-09-042-353-355	Sequence 355, App
11	376.8	71.9	404	3	US-08-758-417A-203	Sequence 203, App
12	354.8	67.7	1431	3	US-08-487-550-11	Sequence 11, Appl
13	354.8	67.7	1431	4	US-09-526-098-11	Sequence 11, Appl
14	354.8	67.7	1431	4	US-09-383-916-11	Sequence 11, Appl
15	342.4	65.3	1404	3	US-08-523-894-7	Sequence 7, Appli
16	342	65.3	1431	3	US-08-487-550-3	Sequence 3, Appli
17	342	65.3	1431	4	US-09-526-098-3	Sequence 3, Appli
18	342	65.3	1431	4	US-09-383-916-3	Sequence 3, Appli
19	341.8	65.2	417	4	US-09-203-768A-1	Sequence 1, Appli
20	340.8	65.0	1404	3	US-08-523-894-9	Sequence 9, Appli
21	340.8	65.0	1404	3	US-08-523-894-11	Sequence 11, Appl
22	321	61.3	413	3	US-09-042-353-351	Sequence 351, App
23	321	61.3	413	3	US-08-758-417A-199	Sequence 199, App
24	319.2	60.9	1341	4	US-09-372-425A-7	Sequence 7, Appli
25	311.2	59.4	462	3	US-08-724-752-14	Sequence 14, Appl
26	311.2	59.4	462	4	US-09-614-092A-14	Sequence 14, Appl
27	308.6	58.9	399	3	US-08-724-752-10	Sequence 10, Appl
28	308.6	58.9	399	4	US-09-614-092A-10	Sequence 10, Appl
29	306	58.4	516	4	US-09-472-087-33	Sequence 33, Appl
30	290	55.3	402	1	US-08-259-372A-5	Sequence 5, Appli
31	290	55.3	402	1	US-08-468-671-5	Sequence 5, Appli
32	286.2	54.6	687	3	US-08-545-809A-34	Sequence 34, Appl
33	278.4	53.1	426	2	US-08-480-774A-1	Sequence 1, Appli
34	275.6	52.6	1543	4	US-09-800-729-74	Sequence 74, Appl
35	274.6	52.4	450	4	US-09-582-337-13	Sequence 13, Appl
36	272.8	52.1	384	2	US-08-477-553A-49	Sequence 49, Appl
37	269.6	51.5	369	3	US-08-793-450-3	Sequence 3, Appli
38	268	51.1	363	2	US-08-477-553A-50	Sequence 50, Appl
39	260.6	49.7	622	3	US-08-545-809A-59	Sequence 59, Appl
40	258.2	49.3	1458	4	US-08-030-175-7	Sequence 7, Appli
41	257.8	49.2	423	3	US-08-803-085-2	Sequence 2, Appli
42	256.6	49.0	1458	4	US-08-030-175-6	Sequence 6, Appli
43	256.4	48.9	1392	4	US-09-472-087-30	Sequence 30, Appl
44	256.4	48.9	1392	4	US-09-472-087-59	Sequence 59, Appl
45	256.2	48.9	285	3	US-09-042-353-150	Sequence 150, App

ALIGNMENTS

RESULT 1

US-09-042-353-419

; Sequence 419, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 419:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 524 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-419

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Query Match          100.0%;  Score 524;  DB 3;  Length 524;
Best Local Similarity 100.0%;  Pred. No. 3.4e-150;
Matches 524;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGG 60
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Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
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Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

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Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
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 Db 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCTGGTCACCGTCTCCTCAGCCTCA 420

Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

RESULT 2

US-08-758-417A-219

; Sequence 219, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
 ; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

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; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 219:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 524 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 219:
US-08-758-417A-219

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Query Match          100.0%; Score 524; DB 3; Length 524;
Best Local Similarity 100.0%; Pred. No. 3.4e-150;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60

Qy     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120

Qy    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180

Qy    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240

Qy    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300

Qy    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360

Qy    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420

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Qy      421 ACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      421 ACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480

Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
        ||||||||||||||||||||||||||||||||||||||||||
Db      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

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RESULT 3

US-09-042-353-418

; Sequence 418, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; PRIOR APPLICATION DATA:


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; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 418:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4926 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-418

```

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Query Match          100.0%;  Score 524;  DB 3;  Length 4926;
Best Local Similarity 100.0%;  Pred. No. 9.2e-150;
Matches 524;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
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Db      16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75
        |||

Qy      61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        |||
Db      76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135
        |||

Qy      121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        |||
Db      136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195
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Qy      181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 240
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Db      196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACC 255

Qy      241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315

Qy      301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375

Qy      361 GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
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Db      376 GTAATTAATTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 435

Qy      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
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Db      436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495

Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db      496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539

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RESULT 4

US-08-758-417A-268

; Sequence 268, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for

; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

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; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 268:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4926 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 268:
US-08-758-417A-268

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Query Match          100.0%; Score 524; DB 3; Length 4926;
Best Local Similarity 100.0%; Pred. No. 9.2e-150;
Matches 524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 60
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Db      16 AAGCTTGCCACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGG 75

Qy      61 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      76 GTCCTGTCTCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACC 135

Qy     121 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     136 CTGTCCCTCACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATC 195

Qy     181 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     196 CGCCAGCCACCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACC 255

Qy     241 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     256 AACTACAACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAG 315

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Qy 301 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 360
 |||
 Db 316 TTCTCTCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA 375
 |||
 Qy 361 GTAATTAATTGGTTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
 |||
 Db 376 GTAATTAATTGGTTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 435
 |||
 Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
 |||
 Db 436 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 495
 |||
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 496 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 539
 |||

RESULT 5

US-08-793-450-7

; Sequence 7, Application US/08793450

; Patent No. 6312690

; GENERAL INFORMATION:

; APPLICANT: EDELMAN, LENA

; APPLICANT: MARGARITTE, CHRISTEL

; APPLICANT: KACZOREK, MICHEL

; APPLICANT: CHAABIHI, HASSAN

; TITLE OF INVENTION: MONOCLONAL RECOMBINANT ANTI-RHESUS D

; TITLE OF INVENTION:

; NUMBER OF SEQUENCES: 25

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,

; ADDRESSEE: P.C.

; STREET: 1755 SOUTH JEFFERSON DAVIS HIGHWAY, SUITE 400

; CITY: ARLINGTON

; STATE: VA

; COUNTRY: USA

; ZIP: 22202

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/793,450

; FILING DATE: 03-MAR-1997

; CLASSIFICATION: 536

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: FR 94/10566

; FILING DATE: 02-SEP-1994

; ATTORNEY/AGENT INFORMATION:

; NAME: OBLON, NORMAN F.

; REGISTRATION NUMBER: 24,618

; REFERENCE/DOCKET NUMBER: 660-118-0 PCT

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-413-3000

; TELEFAX: 703-413-2220

; INFORMATION FOR SEQ ID NO: 7:

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; SEQUENCE CHARACTERISTICS:
;     LENGTH:   1418 base pairs
;     TYPE:     nucleic acid
;     STRANDEDNESS:  single
;     TOPOLOGY:  linear
; MOLECULE TYPE:  other nucleic acid
; FEATURE:
;     NAME/KEY:  CDS
;     LOCATION:  1..1418
; FEATURE:
;     NAME/KEY:  sig_peptide
;     LOCATION:  1..57
; FEATURE:
;     NAME/KEY:  mat_peptide
;     LOCATION:  58..1418
;     OTHER INFORMATION:  /product= "IMMUNOGLOBIN, HEAVY
;     OTHER INFORMATION:  CHAIN"
US-08-793-450-7

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Query Match 75.5%; Score 395.6; DB 3; Length 1418;
Best Local Similarity 87.0%; Pred. No. 7.8e-111;
Matches 456; Conservative 0; Mismatches 44; Indels 24; Gaps 1;

[illegible]

Db

493 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 6

US-09-049-672A-17

; Sequence 17, Application US/09049672A

; Patent No. 6135941

; GENERAL INFORMATION:

; APPLICANT: Hillman, Jennifer L.

; APPLICANT: Lal, Preeti

; APPLICANT: Tang, Y. Tom

; APPLICANT: Yue, Henry

; APPLICANT: Au-Young, Janice

; APPLICANT: Corley, Neil C.

; APPLICANT: Guegler, Karl J.

; APPLICANT: Baughn, Mariah R.

; TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS

; NUMBER OF SEQUENCES: 28

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Incyte Pharmaceuticals, Inc.

; STREET: 3174 Porter Drive

; CITY: Palo Alto

; STATE: CA

; COUNTRY: USA

; ZIP: 94304

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSEQ for Windows Version 2.0

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/049,672A

; FILING DATE: HEREWITH

; CLASSIFICATION: 536

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: Cerrone, Michael C

; REGISTRATION NUMBER: 39,132

; REFERENCE/DOCKET NUMBER: PF-0497 US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 650-855-0555

; TELEFAX: 650-845-4166

; TELEX:

; INFORMATION FOR SEQ ID NO: 17:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1567 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; IMMEDIATE SOURCE:

; LIBRARY: PANCTUT01

; CLONE: 1513264

US-09-049-672A-17

Query Match

75.0%; Score 392.8; DB 3; Length 1567;


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; STATE: CA
; COUNTRY: USA
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy Disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Windows 98
; SOFTWARE: MS Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/372,425A
; FILING DATE: August 11, 1999
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Oldenakmp, David J.
; REGISTRATION NUMBER: 29,421
; REFERENCE/DOCKET NUMBER: 510015-223
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (310) 788-5000
; TELEFAX: (310) 788-5100
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2674 nucleotides
; TYPE: nucleotide
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Heavy chain with Tailpiece - DNA
; MOLECULE TYPE: (with introns)
US-09-372-425A-1

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Query Match          73.5%; Score 385.2; DB 4; Length 2674;
Best Local Similarity 83.8%; Pred. No. 1.5e-107;
Matches 469; Conservative 0; Mismatches 43; Indels 48; Gaps 1;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGGTCCTGTCTCAG 72
        |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 TGCCTGTCTATGGTGGTTCCTTCAGTGGTCACTGAGTTGGATCCGCCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        || ||||| ||||||||||||||| ||||| ||||||||||||||| |||||
Db     181 GGAAGGGGCTGGAGTGGATTGGAGAAATCGATCATAGTGAAGCACCAATTACAACCCG 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
        || |||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCGTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTG- 371

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; FILING DATE: 16-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 357:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 403 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-357

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Query Match          73.2%; Score 383.8; DB 3; Length 403;
Best Local Similarity 97.0%; Pred. No. 1.8e-107;
Matches 391; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

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Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
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 Db 1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
 |||
 Db 61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy 133 TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
 |||
 Db 121 TGCGCTGTCTATGGTGGGTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCCA 180

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
 |||
 Db 181 GGTAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCG 240

Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
 |||
 Db 241 TCCCTCAAGAGTCGAGTCACCATATCAGTCGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
 |||
 Db 301 CTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 360

Qy 373 TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG 415
 |||
 Db 361 TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG 403

RESULT 9

US-08-758-417A-205

; Sequence 205, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
 ; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

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; FILING DATE: 10-OCT-1996
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Serafini, Andrew T.
; REGISTRATION NUMBER: 41,303
; REFERENCE/DOCKET NUMBER: 014643-009030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 205:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 403 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 205:
US-08-758-417A-205

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Query Match          73.2%;  Score 383.8;  DB 3;  Length 403;
Best Local Similarity 97.0%;  Pred. No. 1.8e-107;
Matches 391;  Conservative 0;  Mismatches 12;  Indels 0;  Gaps 0;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1  ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCCTGTCCCTCACC 132
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
        ||||||||||||||||| ||||||||||||||||||||||||||||||||
Db     121 TGCCTGTCTATGGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
        ||||||||| ||||||||||||||||| ||||||||||||||||||||||||
Db     181 GGTAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCG 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312

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; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 355:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 404 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-355

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Query Match          71.9%; Score 376.8; DB 3; Length 404;
Best Local Similarity 97.0%; Pred. No. 2.4e-105;
Matches 384; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

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Qy      10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
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Db      9 AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 68

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      69 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 128

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Qy      130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
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Db      129 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCC 188

Qy      190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
        |||
Db      189 CCAGGTAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAAC 248

Qy      250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
        |||
Db      249 CCGTCCCTCAAGAGTCGAGTCACCATATCAGTCGACACGTCCAAGAACCAGTTCTCCCTG 308

Qy      310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT 369
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Db      309 AAAGTGAAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT 368

Qy      370 TGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACC 405
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Db      369 TGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACC 404

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RESULT 11

US-08-758-417A-203

; Sequence 203, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

Db

||||| 369 TGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACC 404

RESULT 12

US-08-487-550-11

; Sequence 11, Application US/08487550

; Patent No. 6113898

; GENERAL INFORMATION:

; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC

; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,

; TITLE OF INVENTION: PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF

AS

; TITLE OF INVENTION: IMMUNOSUPPRESANTS"

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

; CITY: Alexandria

; STATE: VA

; COUNTRY: USA

; ZIP: 22314

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/487,550

; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-131

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6620

; TELEFAX: 703-836-2021

; INFORMATION FOR SEQ ID NO: 11:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1431 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: not relevant

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..1431

; FEATURE:

; NAME/KEY: mat_peptide

; LOCATION: 1..1431

US-08-487-550-11

Query Match 67.7%; Score 354.8; DB 3; Length 1431;

Best Local Similarity 83.0%; Pred. No. 2.2e-98;

Matches 455; Conservative 0; Mismatches 57; Indels 36; Gaps 3;

Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
 |||
 Db 1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
 |||
 Db 61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy 133 TGCCTGTCTATGGTGGTTCTTCA---GTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
 |||
 Db 121 TGCCTGTCTCTGGTGGCTCCATCAGCGGTGGTTATGGCTGGGGCTGGATCCGCCAGCCC 180

Qy 190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATC---AATCATAGTGGAAGCACCAACTAC 246
 |||
 Db 181 CCAGGGAAGGGCTGGAGTGGATTGGGAGTTTCTATAGTAGTAGTGGGAACACCTACTAC 240

Qy 247 AACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCT 306
 |||
 Db 241 AACCCCTCCCTCAAGAGTCAAGTCACCATTTCAACAGACACGTCCAAGAACCAGTTCTCC 300

Qy 307 CTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
 |||
 Db 301 CTGAAGCTGAACCTCTATGACCGCCGCGGACACGGCCGTGTATTACTGTGTGAGAGATCGT 360

Qy 362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACC 396
 |||
 Db 361 CTTTTTTCAGTTGTTGGAATGGTTTACAACAACCTGGTTCGATGTCTGGGGCCCGGGAGTC 420

Qy 397 CTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 456
 |||
 Db 421 CTGGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 480

Qy 457 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 516
 |||
 Db 481 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 540

Qy 517 GAACCGGT 524
 |||
 Db 541 GAACCGGT 548

RESULT 13

US-09-526-098-11

; Sequence 11, Application US/09526098

; Patent No. 6492134

; GENERAL INFORMATION:

; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC

; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,

; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF

AS

; TITLE OF INVENTION: IMMUNOSUPPRESANTS"

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

```

; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/526,098
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1431 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1431
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..1431
US-09-526-098-11

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Query Match          67.7%;  Score 354.8;  DB 4;  Length 1431;
Best Local Similarity 83.0%;  Pred. No. 2.2e-98;
Matches 455;  Conservative 0;  Mismatches 57;  Indels 36;  Gaps 3;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
        |||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
        |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy      133 TGCCTGTCTATGGTGGTTCTTCA--GTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
        |||
Db      121 TGCCTGTCTCTGGTGGCTCCATCAGCGGTGGTTATGGCTGGGGCTGGATCCGCCAGCCC 180

Qy      190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATC--AATCATAGTGAAGCACCAACTAC 246

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Db      181 CCAGGGAAGGGGCTGGAGTGGATTGGGAGTTTCTATAGTAGTAGTGGGAACACCTACTAC 240

Qy      247 AACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCT 306
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      241 AACCCCTCCCTCAAGAGTCAAGTCACCATTTCAACAGACACGTCCAAGAACCAGTTCTCC 300

Qy      307 CTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      301 CTGAAGCTGAACTCTATGACCGCCGCGGACACGGCCGTGTATTACTGTGTGAGAGATCGT 360

Qy      362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACC 396
      | || ||||| ||||| ||||| |||||
Db      361 CTTTTTTCAGTTGTTGGAATGGTTTACAACAAGTGGTTCGATGTCTGGGGCCCGGGAGTC 420

Qy      397 CTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 456
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 CTGGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 480

Qy      457 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 516
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 540

Qy      517 GAACCGGT 524
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Db      541 GAACCGGT 548

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RESULT 14

US-09-383-916-11

; Sequence 11, Application US/09383916

; Patent No. 6709654

; GENERAL INFORMATION:

; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC

; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,

; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF

AS

; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

; CITY: Alexandria

; STATE: VA

; COUNTRY: USA

; ZIP: 22314

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/383,916

; FILING DATE: 26-AUG-1999

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

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; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1431 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1431
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..1431
US-09-383-916-11

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Query Match          67.7%; Score 354.8; DB 4; Length 1431;
Best Local Similarity 83.0%; Pred. No. 2.2e-98;
Matches 455; Conservative 0; Mismatches 57; Indels 36; Gaps 3;

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Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
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Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
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Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTCTTCA---GTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
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Db     121 TGCCTGTCTCTGGTGGCTCCATCAGCGTGGTTATGGCTGGGGCTGGATCCGCCAGCCC 180

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATC---AATCATAGTGAAGCACCAACTAC 246
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Db     181 CCAGGGAAGGGGCTGGAGTGGATTGGGAGTTTCTATAGTAGTAGTGGGAACACCTACTAC 240

Qy     247 AACCCTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCT 306
      |||
Db     241 AACCCTCCCTCAAGAGTCAAGTCACCATTTCAACAGACACGTCCAAGAACCAGTTCTCC 300

Qy     307 CTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
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Db     301 CTGAAGCTGAACTCTATGACCGCCGCGGACACGGCCGTGTATTACTGTGTGAGAGATCGT 360

Qy     362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACC 396
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Db     361 CTTTTTTCAGTTGTTGGAATGGTTTACAACAACTGGTTCGATGTCTGGGGCCCCGGGAGTC 420

Qy     397 CTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCC 456

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Db      421 CTGGTCACCGTCTCTCTCAGCTAGCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCC 480
Qy      457 TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCC 516
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Qy      517 GAACCGGT 524
Db      541 GAACCGGT 548

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RESULT 15

US-08-523-894-7

; Sequence 7, Application US/08523894

; Patent No. 6136310

; GENERAL INFORMATION:

; APPLICANT: Hanna, Nabil

; APPLICANT: Newman, Roland A.

; APPLICANT: Reff, Mitchell E.

; TITLE OF INVENTION: Recombinant Anti-CD4 Antibodies for Human

; TITLE OF INVENTION: Therapy

; NUMBER OF SEQUENCES: 59

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS

; STREET: 699 Prince Street

; CITY: Alexandria

; STATE: VA

; COUNTRY: USA

; ZIP: 22314-3187

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/523,894

; FILING DATE: 06-SEP-1995

; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-165

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6620

; TELEFAX: 703-836-2021

; INFORMATION FOR SEQ ID NO: 7:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1404 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; POSITION IN GENOME:

; CHROMOSOME/SEGMENT: heavy chain variable and constant gamma

; CHROMOSOME/SEGMENT: 4

; FEATURE:

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; NAME/KEY: CDS
; LOCATION: 1..1404
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..1404
US-08-523-894-7

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Query Match          65.3%; Score 342.4; DB 3; Length 1404;
Best Local Similarity 82.3%; Pred. No. 1.3e-94;
Matches 436; Conservative 0; Mismatches 76; Indels 18; Gaps 3;

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Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCCCCAGATGGGTCTTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTCTTCCTCAGTGGT---TACTACTGGAGCTGGATCCGCCAGCCA 189
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Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAAT---CATAGTGGAAGCACCAACTAC 246
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Db     181 CCAGGGAAGGGACTGGAGTGGATCGGCTACATCTATGGCAGTGGTGGGGGCACCAATTAC 240

Qy     247 AACCCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCT 306
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Qy     307 CTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAG----- 359
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Db     301 CTGAAACTGAGGTCTGTGACCGCCGCGGACACGGCCGTCTATTACTGTGCGAGTAATATA 360

Qy     360 -----AGTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 414
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Db     421 GCTAGCACCAAGGGCCCATCCGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480

Qy     475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db     481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

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Job time : 77.5326 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 17:01:26 ; Search time 401.747 Seconds
(without alignments)
7166.911 Million cell updates/sec

Title: US-08-728-463B-219
Perfect score: 524
Sequence: 1 AAGCTTGCCACCATGAAACA.....GACTACTTCCCCGAACCGGT 524

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3694831 seqs, 2747406616 residues

Total number of hits satisfying chosen parameters: 7389662

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*

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- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
- 13: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
- 14: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
- 15: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
- 16: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
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- 18: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
- 19: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*
- 20: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
- 21: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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No.	Score						
	1	409.4	78.1	1990	17	US-10-684-109-104	Sequence 104, App
c	2	409.4	78.1	1990	17	US-10-684-109-105	Sequence 105, App
	3	407.2	77.7	1401	15	US-10-292-088-85	Sequence 85, Appl

	4	406.2	77.5	1990	17	US-10-684-109-69	Sequence 69, Appl
c	5	406.2	77.5	1990	17	US-10-684-109-70	Sequence 70, Appl
	6	405.6	77.4	629	16	US-10-264-049-2156	Sequence 2156, Ap
	7	404	77.1	1401	15	US-10-292-088-69	Sequence 69, Appl
	8	399.8	76.3	1990	17	US-10-684-109-86	Sequence 86, Appl
c	9	399.8	76.3	1990	17	US-10-684-109-87	Sequence 87, Appl
	10	397.6	75.9	1401	15	US-10-292-088-29	Sequence 29, Appl
	11	396.6	75.7	1990	17	US-10-684-109-98	Sequence 98, Appl
c	12	396.6	75.7	1990	17	US-10-684-109-99	Sequence 99, Appl
	13	392.4	74.9	1395	15	US-10-292-088-21	Sequence 21, Appl
	14	385.2	73.5	669	10	US-09-972-656-65	Sequence 65, Appl
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	16	375.8	71.7	1996	17	US-10-684-109-92	Sequence 92, Appl
c	17	375.8	71.7	1996	17	US-10-684-109-93	Sequence 93, Appl
	18	371	70.8	1996	17	US-10-684-109-110	Sequence 110, App
c	19	371	70.8	1996	17	US-10-684-109-111	Sequence 111, App
	20	367.8	70.2	687	10	US-09-972-656-81	Sequence 81, Appl
	21	365.8	69.8	690	10	US-09-972-656-71	Sequence 71, Appl
	22	363.6	69.4	829	13	US-10-040-739-210	Sequence 210, App
	23	361	68.9	519	16	US-10-309-762-174	Sequence 174, App
	24	355.6	67.9	663	10	US-09-972-656-79	Sequence 79, Appl
	25	354.8	67.7	1431	9	US-09-758-173-11	Sequence 11, Appl
	26	354.8	67.7	1431	9	US-09-948-429B-11	Sequence 11, Appl
	27	354.8	67.7	1431	13	US-10-124-905-11	Sequence 11, Appl
	28	354.8	67.7	1431	15	US-10-124-807-11	Sequence 11, Appl
	29	354.8	67.7	1431	15	US-10-291-532-11	Sequence 11, Appl
	30	353.4	67.4	1539	9	US-09-822-849A-87	Sequence 87, Appl
	31	353.2	67.4	1431	13	US-10-073-138-6	Sequence 6, Appli
	32	342.4	65.3	1404	14	US-10-211-357-7	Sequence 7, Appli
	33	342	65.3	1431	9	US-09-758-173-3	Sequence 3, Appli
	34	342	65.3	1431	9	US-09-948-429B-3	Sequence 3, Appli
	35	342	65.3	1431	13	US-10-124-905-3	Sequence 3, Appli
	36	342	65.3	1431	15	US-10-124-807-3	Sequence 3, Appli
	37	342	65.3	1431	15	US-10-291-532-3	Sequence 3, Appli
	38	341.8	65.2	417	15	US-10-300-675-1	Sequence 1, Appli
	39	341.6	65.2	655	9	US-09-920-345-4	Sequence 4, Appli
	40	340.8	65.0	1404	14	US-10-211-357-9	Sequence 9, Appli
	41	340.8	65.0	1404	14	US-10-211-357-11	Sequence 11, Appl
	42	340.4	65.0	1431	13	US-10-073-138-2	Sequence 2, Appli
	43	338.2	64.5	1566	16	US-10-108-260A-1850	Sequence 1850, Ap
	44	321.6	61.4	539	16	US-10-309-762-172	Sequence 172, App
	45	321	61.3	481	17	US-10-693-629-43	Sequence 43, Appl

ALIGNMENTS

RESULT 1

US-10-684-109-104

; Sequence 104, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

```

; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-104

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Best Local Similarity 88.5%; Pred. No. 4.8e-120;
Matches 456; Conservative 0; Mismatches 56; Indels 3; Gaps 1;

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Db      1 ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
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Db      61 GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCGCTGTCTATGGTGGTTCTTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
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Db     121 TGCAGTGTCTCTGGTGGCTCCATCAGTCGTTACTACTGGAGCTGGATCCGGCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG 252
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Db     181 GGGTAAGGGACTGGAGTGGATTGGGTATGTCTCTTACAGTGGGAGCACCTACTACAACCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
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Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
        |||
Db     301 CTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGATAAACTGGGG 360

Qy     373 TT---CGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC 429
        |||
Db     361 ATTGGAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC 420

Qy     430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
        |||
Db     421 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480

Qy     490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db     481 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515

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RESULT 2

Db 1570 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 1511

QY 490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

Db 1510 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 1476

Query Match 77.7%; Score 407.2; DB 15; Length 1401;
Best Local Similarity 87.5%; Pred. No. 2.2e-119;
Matches 464; Conservative 0; Mismatches 48; Indels 18; Gaps 1;

Db 301 CTGAGTTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAAGGGGGGGCCTC 360
 Qy 361 -----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCTGGTCACCGTCTCCTCA 414
 Db 361 TACGGTGACTACGGCTGSTTCGCCCCCTGGGGCCAGGGAACCTGGTCACCGTCTCCTCA 420
 Qy 415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGG 474
 Db 421 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480
 Qy 475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 Db 481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

Query Match 77.5%; Score 406.2; DB 17; Length 1990;
Best Local Similarity 88.2%; Pred. No. 5e-119;
Matches 454; Conservative 0; Mismatches 58; Indels 3; Gaps 1;

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
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 Db 181 GGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC 240
 Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
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 Db 241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300
 Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
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 Db 301 CTGAGGTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGAGCGACTGGGG 360
 Qy 373 TTC---GACCCTTGGGGCCAGGGAACCCCTGGTCAACCGTCTCCTCAGCCTCAACCAAGGGC 429
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 Qy 430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
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RESULT 5

US-10-684-109-70/c

; Sequence 70, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 70

; LENGTH: 1990

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-70

Query Match 77.5%; Score 406.2; DB 17; Length 1990;

Best Local Similarity 88.2%; Pred. No. 5e-119;

Matches 454; Conservative 0; Mismatches 58; Indels 3; Gaps 1;

Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCCTGTCTCAG 72
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US-10-264-049-2156

Query Match 77.4%; Score 405.6; DB 16; Length 629;

Best Local Similarity 86.5%; Pred. No. 5.7e-119;

Matches 469; Conservative 0; Mismatches 46; Indels 27; Gaps 1;

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Qy 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
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Qy 310 AAAGTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 314 AAGCTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGGTCCATAT 373

Qy 362 -----TAATTAATTGGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTTC 402
 | | | | | | | | | | | | | | | | | | | | | | | | |
Db 374 AGCAGCAGCTGGTACCCCCGCGCTGAATACTTCAGCACTGGGGCCAGGGCACCCCTGGTTC 433

Qy 403 ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG 462
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 434 ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG 493

Qy 463 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 522
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Db 494 AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG 553
Qy 523 GT 524
||
Db 554 GT 555

RESULT 7

US-10-292-088-69
; Sequence 69, Application US/10292088
; Publication No. US20030211100A1
; GENERAL INFORMATION:
; APPLICANT: BEDIAN, VAHE
; APPLICANT: GLADUE, RONALD P.
; APPLICANT: CORVALAN, JOSE
; APPLICANT: JIA, XIAO-CHI
; APPLICANT: FENG, XIAO
; TITLE OF INVENTION: ANTIBODIES TO CD40
; FILE REFERENCE: ABX-PF/3 US
; CURRENT APPLICATION NUMBER: US/10/292,088
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: 60/348,980
; PRIOR FILING DATE: 2001-11-09
; NUMBER OF SEQ ID NOS: 147
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 69
; LENGTH: 1401
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-292-088-69

Query Match 77.1%; Score 404; DB 15; Length 1401;
Best Local Similarity 87.2%; Pred. No. 2.3e-118;
Matches 462; Conservative 0; Mismatches 50; Indels 18; Gaps 1;

Qy 13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||
Db 1 ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCAGATGGGTCCTGTCCAG 60

Qy 73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
||||| ||| ||| ||| ||||||| ||||||| ||||||| ||||||| |||
Db 61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy 133 TCGCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
||| ||||||| ||||||| ||| ||| ||||||| ||||||| ||||||| |||
Db 121 TGCACTGTCTCTGGTGGCTCCATCAGAGGTTACTACTGGAGCTGGATCCGGCAGCCCCCT 180

Qy 193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
|| ||||| ||||||| ||||||| ||| ||| ||| ||||||| ||||||| |||
Db 181 GGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCC 240

Qy 253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
|| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||
Db 241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy 313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
||| ||||||| ||||||| ||||||| ||||||| ||||||| |||

```

Db      301 CTGAACTCTGTGACCGCTGCGGACACGGCCGTGTATTATTGTGCGAGAAAGGGGGGCCTC 360
Qy      361 -----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 414
          |          ||||| ||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 TACGGTGACTACGGCTGGTTCGCCCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA 420
Qy      415 GCCTCAACCAAGGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG 474
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 GCCTCCACCAAGGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG 480
Qy      475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 530

```

RESULT 8

US-10-684-109-86

```

; Sequence 86, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.02
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711
; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 86
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-86

```

```

Query Match          76.3%; Score 399.8; DB 17; Length 1990;
Best Local Similarity 87.4%; Pred. No. 5.5e-117;
Matches 450; Conservative 0; Mismatches 62; Indels 3; Gaps 1;

```

```

Qy      13 ATGAAACACCTGTGGTTCTTCCCTCCTCGGTGGCAGCTCCTAGATGGGTCTGTCTCAG 72
          ||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1  ATGAAGCATCTGTGGTTCTTCCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG 60
Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120
Qy      133 TGCCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
          ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      121 TGCCTGTCTCTGGTGCCTCCATCAGTAATTACTACTGGAGCTGGATCCGGCAGCCCCCA 180
Qy      193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCACCACTACAACCCG 252

```

```

      || ||||| ||||| ||||| || || || ||||| || || ||||| |||||
Db      181 GGG AAGG GACTGGAGTGGATTGGGTATGTCTCTTACAGTGGGAGTACGTACTACAACCCC 240

Qy      253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      241 TCCCTCAAGGGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy      313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      301 CTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGAAAAACTGGGG 360

Qy      373 TT---CGACCCCTGGGGCCAGGGAACCCTGGTCAACCGTCTCCTCAGCCTCAACCAAGGGC 429
      | ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      361 ATTGGAGACTACTGGGGCCAGGGAACCCTGGTCAACCGTCTCCTCAGCCTCCACCAAGGGC 420

Qy      430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      421 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480

Qy      490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      481 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515

```

RESULT 9

US-10-684-109-87/c

; Sequence 87, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 87

; LENGTH: 1990

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-87

Query Match 76.3%; Score 399.8; DB 17; Length 1990;

Best Local Similarity 87.4%; Pred. No. 5.5e-117;

Matches 450; Conservative 0; Mismatches 62; Indels 3; Gaps 1;

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
      ||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      1990 ATGAAGCATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCAGATGGGTCCTGTCCCAG 1931

```


Query Match 75.9%; Score 397.6; DB 15; Length 1401;
Best Local Similarity 86.4%; Pred. No. 2.5e-116;
Matches 458; Conservative 0; Mismatches 54; Indels 18; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCTTCCTTCCTCCTGGTGGCAGCTCCCTAGATGGGTCCTGTCTCAG	72
Db	1	ATGAAACATCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAG	60
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	61	GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC	120
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	121	TGCACTGTCTCTGGTGGCTCCATCAGAAGTTACTACTGGACCTGGATCCGGCAGCCCCCA	180
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG	252
Db	181	GGGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGCACCAACTACAATCCC	240
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	241	TCCCTCAAGAGTCGAGTCACCATATCAGTAGACATGTCCAAGAACCAGTTCTCCCTGAAG	300
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA-----	360
Db	301	CTGAGTTCTGTGACCGCTGCGGACACGGCCGTTTATTACTGTGCGAGAAAGGGTGACTAC	360
Qy	361	-----GTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA	414
Db	361	GGTGGTAATTTTAACTACTTTACCAAGTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA	420
Qy	415	GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG	474
Db	421	GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAG	480
Qy	475	GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	481	AGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	530

RESULT 11

US-10-684-109-98
; Sequence 98, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.
; APPLICANT: Ostrow, David H.
; APPLICANT: Reilly, Edward B.
; APPLICANT: Wieler, James
; TITLE OF INVENTION: Erythropoietin Receptor Binding
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: 6989.US.O2
; CURRENT APPLICATION NUMBER: US/10/684,109
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 1990
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-684-109-98

Query Match 75.7%; Score 396.6; DB 17; Length 1990;
Best Local Similarity 87.0%; Pred. No. 5.8e-116;
Matches 448; Conservative 0; Mismatches 64; Indels 3; Gaps 1;

```
Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCGTGTCTCAG 72
      |||
Db      1 ATGAAACACCTGTGGTTCTTCCTTCTCCTGGTGGCAGCTCCCAGATGGGTCCGTGCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TCGCTGTCTATGGTGGTTCTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db     121 TGCAGTGTCTCTGGTGTCTCCATCAGTAATTACTACTGGAGCTGGATCCGGCAGTCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      |||
Db     181 GGAAGGGACTGGAGTGGATTGGATATATCTATTACAGTGGGAGTCCCTATTACAACCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      |||
Db     241 TCCCTCAAGAGTCGAGTCACTATATCTGCAGACACGTCCAAGAACCAATTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTGG 372
      |||
Db     301 CTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGCGAGAGAAAACTGGGG 360

Qy     373 TT---CGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC 429
      |||
Db     361 ATTGGAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC 420

Qy     430 CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG 489
      |||
Db     421 CCATCGGTCTTCCCCCTGGCGCCCTGCTCTAGAAGCACCTCCGAGAGCACAGCCGCCCTG 480

Qy     490 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db     481 GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 515
```

RESULT 12

US-10-684-109-99/c
; Sequence 99, Application US/10684109
; Publication No. US20040175379A1
; GENERAL INFORMATION:
; APPLICANT: DeVries, Peter J.
; APPLICANT: Green, Larry L.

RESULT 13

US-10-292-088-21

; Sequence 21, Application US/10292088

; Publication No. US20030211100A1

; GENERAL INFORMATION:

; APPLICANT: BEDIAN, VAHE

; APPLICANT: GLADUE, RONALD P.

; APPLICANT: CORVALAN, JOSE

; APPLICANT: JIA, XIAO-CHI

; APPLICANT: FENG, XIAO

; TITLE OF INVENTION: ANTIBODIES TO CD40

; FILE REFERENCE: ABX-PF/3 US

; CURRENT APPLICATION NUMBER: US/10/292,088

; CURRENT FILING DATE: 2003-03-14

; PRIOR APPLICATION NUMBER: 60/348,980

; PRIOR FILING DATE: 2001-11-09

; NUMBER OF SEQ ID NOS: 147

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 21

; LENGTH: 1395

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-292-088-21

Query Match 74.9%; Score 392.4; DB 15; Length 1395;

Best Local Similarity 86.1%; Pred. No. 1.2e-114;

Matches 451; Conservative 0; Mismatches 61; Indels 12; Gaps 1;

```

Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG 72
      |||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db      61 GTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db     121 TGCCTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGATCTGGATCCGGCAGCCCGCC 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      ||
Db     181 GGGAAGGGACTGGAATGGATTGGGCGTGTCTATACCAGTGGGAGCACCAACTACAACCCC 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTTGAAA 312
      ||
Db     241 TCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATT-- 370
      |||
Db     301 CTGAGCTCTGTGACCGCCGCGGACACGGCCGTGTATTACTGTGCGAGAGATGGTCTTTAC 360

Qy     371 -----GGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCA 420
      |||
Db     361 AGGGGGTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCAGCCTCC 420

```



```

Qy      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
      |||
Db      421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGACA 480

Qy      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      |||
Db      481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524

```

RESULT 14

US-09-972-656-65

```

; Sequence 65, Application US/09972656
; Publication No. US20030099647A1
; GENERAL INFORMATION:
; APPLICANT: Deshpande, Rajendra
; APPLICANT: Tsai, Mei-Mei
; TITLE OF INVENTION: Fully Human Antibody Fab Fragments with Human Interferon-
Gamma
; TITLE OF INVENTION: Neutralizing Activity
; FILE REFERENCE: A-799
; CURRENT APPLICATION NUMBER: US/09/972,656
; CURRENT FILING DATE: 2001-10-05
; NUMBER OF SEQ ID NOS: 135
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 65
; LENGTH: 669
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(669)
US-09-972-656-65

```

```

Query Match          73.5%; Score 385.2; DB 10; Length 669;
Best Local Similarity 90.9%; Pred. No. 1.9e-112;
Matches 427; Conservative 0; Mismatches 28; Indels 15; Gaps 1;

```

```

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      |||
Db      1 CAGGTGCAGCTGCAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 60

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      |||
Db     61 ACCTGCGCTGTCTATGGTGGGTCCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCC 120

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC 249
      |||
Db     121 CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCACCAACTACAAC 180

Qy     250 CCGTCTCTCAAGAGTTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
      |||
Db     181 CCGTCCCTCAAGAGTTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTG 240

Qy     310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAG----- 361
      |||
Db     241 AAGCTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGCCGGGCA 300

```

Qy 362 -----TAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCA 414
 | | | | |
 Db 301 CGGAAGTGGAGATCGCGTTTGGACTACTGGGGCCAGGGAACCCCTGGTCACCGTCTCTAGT 360
 Qy 415 GCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG 474
 | | | | |
 Db 361 GCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGG 420
 Qy 475 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 | | | | |
 Db 421 GGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 470

RESULT 15

US-10-194-801C-1

; Sequence 1, Application US/10194801C

; Publication No. US20030143643A1

; GENERAL INFORMATION:

; APPLICANT: Sherie L. Morrison

; Ramon Montano

; TITLE OF INVENTION: Rh Antibody

; NUMBER OF SEQUENCES: 11

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Shapiro & Dupont LLP

; STREET: 233 Wilshire Boulevard, Suite 700

; CITY: Santa Monica

; STATE: CA

; COUNTRY: USA

; ZIP: 90067

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy Disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: Windows 2000

; SOFTWARE: MS Word

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/194,801C

; FILING DATE: 11-Mar-2003

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 09/372,425

; FILING DATE: August 11, 1999

; ATTORNEY/AGENT INFORMATION:

; NAME: Oldenkamp, David J.

; REGISTRATION NUMBER: 29,421

; REFERENCE/DOCKET NUMBER: 0180.0033

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (310) 319-5411

; TELEFAX: (310) 319-5401

; INFORMATION FOR SEQ ID NO: 1:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 2674 nucleotides

; TYPE: nucleotide

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: Heavy chain with Tailpiece - DNA

; (with introns)

; SEQUENCE DESCRIPTION: SEQ ID NO: 1
US-10-194-801C-1

Query Match 73.5%; Score 385.2; DB 15; Length 2674;
Best Local Similarity 83.8%; Pred. No. 2.7e-112;
Matches 469; Conservative 0; Mismatches 43; Indels 48; Gaps 1;

```
Qy      13 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCCTGTCTCAG 72
      |||
Db      1 ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCCTGTCCCAG 60

Qy      73 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 132
      |||
Db      61 GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC 120

Qy     133 TGCCTGTCTATGGTGGTTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA 192
      |||
Db     121 TGCCTGTCTATGGTGGGTCTTCAGTGGTCACTACTGGAGTTGGATCCGCCAGCCCCCA 180

Qy     193 GGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAACCCG 252
      |||
Db     181 GGGAAGGGGCTGGAGTGGATTGGAGAAATCGATCATAGTGAAGCACCAATTACAACCCG 240

Qy     253 TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA 312
      |||
Db     241 TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCGTGAAG 300

Qy     313 CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAATTG- 371
      |||
Db     301 CTGACCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAAGCCGGCATTGT 360

Qy     372 -----GTTCGACCCTTGG 384
      |||
Db     361 ACAAGTATCAGCTGTTTTTCAGTATTATTTAGGATACTACTACTACTACATGGACGTCTGG 420

Qy     385 GGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCC 444
      |||
Db     421 GGCAAGGGGACCACGGTCAACCGTCTCCTCAGCTAGCACCAAGGGCCCATCGGTCTTCCCC 480

Qy     445 CTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAG 504
      |||
Db     481 CTGGCGCCCTGCTCCAGGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAG 540

Qy     505 GACTACTTCCCCGAACCGGT 524
      |||
Db     541 GACTACTTCCCCGAACCGGT 560
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Search completed: December 3, 2004, 02:43:23
Job time : 403.747 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:03 ; Search time 2727.54 Seconds
 (without alignments)
 7000.593 Million cell updates/sec

Title: US-08-728-463B-219
 Perfect score: 524
 Sequence: 1 AAGCTTGCCACCATGAAACA.....GACTACTTCCCCGAACCGGT 524

Scoring table: IDENTITY_NUC
 Gapop 10.0 , Gapext 1.0

Searched: 32822875 seqs, 18219865908 residues

Total number of hits satisfying chosen parameters: 65645750

Minimum DB seq length: 0
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
 Maximum Match 100%
 Listing first 45 summaries

Database : EST:*
 1: gb_est1:*
 2: gb_est2:*
 3: gb_htc:*
 4: gb_est3:*
 5: gb_est4:*
 6: gb_est5:*
 7: gb_est6:*
 8: gb_gss1:*
 9: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query		DB	ID	Description
		Match	Length			
1	449.4	85.8	980	5	BQ706553	BQ706553 AGENCOURT
2	438	83.6	931	5	BQ707803	BQ707803 AGENCOURT
3	432	82.4	931	5	BQ878887	BQ878887 AGENCOURT
4	421.4	80.4	987	5	BQ710722	BQ710722 AGENCOURT
5	419	80.0	918	5	BQ706212	BQ706212 AGENCOURT
6	419	80.0	974	5	BQ705980	BQ705980 AGENCOURT
7	417.6	79.7	936	5	BQ708110	BQ708110 AGENCOURT
8	416.8	79.5	901	5	BQ711045	BQ711045 AGENCOURT
9	416.8	79.5	922	5	BQ710311	BQ710311 AGENCOURT
10	416.8	79.5	943	5	BQ712501	BQ712501 AGENCOURT
11	415.4	79.3	796	5	BQ707968	BQ707968 AGENCOURT
12	408.4	77.9	971	5	BQ882187	BQ882187 AGENCOURT
13	405.8	77.4	1001	5	BQ712107	BQ712107 AGENCOURT
14	404.6	77.2	911	5	BQ711708	BQ711708 AGENCOURT
15	403.8	77.1	912	5	BQ709996	BQ709996 AGENCOURT

16	403.6	77.0	949	5	BQ711114	BQ711114	AGENCOURT
17	403.2	76.9	943	5	BQ898973	BQ898973	AGENCOURT
18	403	76.9	932	5	BQ709785	BQ709785	AGENCOURT
19	402.8	76.9	844	4	BI489640	BI489640	603032108
20	402.8	76.9	855	5	BQ707083	BQ707083	AGENCOURT
21	402.4	76.8	866	5	BQ709485	BQ709485	AGENCOURT
22	402	76.7	920	5	BQ716897	BQ716897	AGENCOURT
23	401.8	76.7	903	5	BQ706579	BQ706579	AGENCOURT
24	401.6	76.6	973	5	BQ709500	BQ709500	AGENCOURT
25	400.4	76.4	951	5	BQ709739	BQ709739	AGENCOURT
26	399.6	76.3	913	5	BQ708291	BQ708291	AGENCOURT
27	399	76.1	961	5	BQ709221	BQ709221	AGENCOURT
28	396.8	75.7	921	5	BQ710000	BQ710000	AGENCOURT
29	396.8	75.7	954	5	BQ716910	BQ716910	AGENCOURT
30	396.6	75.7	672	6	CD703774	CD703774	EST20301
31	396.6	75.7	1048	5	BQ710742	BQ710742	AGENCOURT
32	396.4	75.6	938	5	BQ710911	BQ710911	AGENCOURT
33	395	75.4	857	4	BG682200	BG682200	602629507
34	394	75.2	830	4	BM008496	BM008496	603617496
35	393.6	75.1	951	5	BQ898539	BQ898539	AGENCOURT
36	393.2	75.0	932	5	BQ707613	BQ707613	AGENCOURT
37	392.6	74.9	889	4	BG758751	BG758751	602713110
38	392.4	74.9	883	5	BQ711937	BQ711937	AGENCOURT
39	390.6	74.5	924	5	BQ708516	BQ708516	AGENCOURT
40	390.4	74.5	948	4	BM007780	BM007780	603617239
41	388.8	74.2	935	5	BQ710683	BQ710683	AGENCOURT
42	387.4	73.9	509	2	AW406349	AW406349	UI-HF-BLO
43	387.4	73.9	888	5	BQ708773	BQ708773	AGENCOURT
44	387.4	73.9	937	5	BQ709778	BQ709778	AGENCOURT
45	387.2	73.9	974	4	BM914396	BM914396	AGENCOURT

ALIGNMENTS

RESULT 1

BQ706553

LOCUS BQ706553 980 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8487920 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6300742
5', mRNA sequence.

ACCESSION BQ706553

VERSION BQ706553.1 GI:21845452

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 980)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Db 436 AAGGGCCCCATCGGTCTTCCCCCTGGCACCTCCTCCAAGAGCACCTCTGGGGGCACAGCA 495

Qy 484 GCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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Db 496 GCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 536

RESULT 2

BQ707803

LOCUS BQ707803 931 bp mRNA linear EST 16-JUL-2002
 DEFINITION AGENCOURT_8353015 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278020
 5', mRNA sequence.

ACCESSION BQ707803

VERSION BQ707803.1 GI:21846702

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 931)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2465 row: f column: 05

High quality sequence stop: 736.

FEATURES

source

Location/Qualifiers

1..931

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6278020"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."

ORIGIN

Query Match 83.6%; Score 438; DB 5; Length 931;

Best Local Similarity 90.4%; Pred. No. 1.7e-112;

Matches 490; Conservative 0; Mismatches 25; Indels 27; Gaps 1;

Qy 10 ACCATGAAACACCTGTGGTTCTTCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69

Db	23		AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC	82
Qy	70		CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	129
Db	83		CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	142
Qy	130		ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA	189
Db	143		ACCTGCGCTGTCCATGGCGGGTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCC	202
Qy	190		CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC	249
Db	203		CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAAC	262
Qy	250		CCGTCTCTCAAGAGTCGAGTCAACATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	263		CCGTCCCTCAAGAGTCGAGTCAACATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTG	322
Qy	310		AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAG-----	359
Db	323		AAGCTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGACGACATCGG	382
Qy	360		-----AGTAATTAATTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTC	402
Db	383		CTATGGTTCGGGGACTTATTCTGTTCTCCTGGTTCGACCCCTGGGGCCAGGGAACCCCTGGTC	442
Qy	403		ACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	462
Db	443		ACCGTGTCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG	502
Qy	463		AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	522
Db	503		AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCG	562
Qy	523		GT 524	
Db	563		GT 564	

RESULT 3

BQ878887

LOCUS BQ878887 931 bp mRNA linear EST 16-AUG-2002

DEFINITION AGENCOURT_8119707 Lupski_dorsal_root_ganglion Homo sapiens cDNA
clone IMAGE:6177774 5', mRNA sequence.

ACCESSION BQ878887

VERSION BQ878887.1 GI:22270895

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 931)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Qy 310 AACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAAT 369
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 Db 334 AAGCTGAGCTCTGTGACCGCCGCGGACACGGCTCTGTATTACTGTGCGAGAGGTGTGCTT 393
 Qy 370 TGG-----TTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCA 420
 || |||||
 Db 394 TCGTTGTACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAGCCTCC 453
 Qy 421 ACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACA 480
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 Db 454 ACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGTCTCCAGGAGCACCTCCGAGAGCACA 513
 Qy 481 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
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 Db 514 GCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 557

RESULT 4

BQ710722

LOCUS BQ710722 987 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8292332 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6280863
 5', mRNA sequence.

ACCESSION BQ710722

VERSION BQ710722.1 GI:21849621

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 987)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2472 row: 1 column: 16

High quality sequence stop: 530.

FEATURES

source

Location/Qualifiers

1..987

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6280863"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the

laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 80.4%; Score 421.4; DB 5; Length 987;
 Best Local Similarity 88.6%; Pred. No. 8.3e-108;
 Matches 483; Conservative 0; Mismatches 26; Indels 36; Gaps 1;

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Qy      16 AAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAGGTG 75
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Db      1  AAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAGGTG 60

Qy      76 CAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGC 135
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Db      61 CAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGC 120

Qy     136 GCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCAGGT 195
        |||
Db     121 GCTGTCTATGGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCCAGGG 180

Qy     196 AAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCT 255
        |||
Db     181 AAGGGACTGGAGTGGATTGGGGGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCC 240

Qy     256 CTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAACTG 315
        |||
Db     241 CTCAAGAGTCGAGTCACCATATCACTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTG 300

Qy     316 AGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTA----- 367
        |||
Db     301 AGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGACGGAAAACCTATTAT 360

Qy     368 -----ATTGGTTTCGACCCTTGGGGCCAGGGAACCCCTG 399
        || || || |||
Db     361 GATTACGTTTGGGGGAGTTATCGTCCCCCTTTACTTTGACTACTGGGGCCAGGGAACGCTG 420

Qy     400 GTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC 459
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Db     421 GTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC 480

Qy     460 AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 519
        |||
Db     481 AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 540

Qy     520 CCGGT 524
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Db     541 CCGGT 545
  
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RESULT 5

BQ706212

LOCUS BQ706212 918 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8353247 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278226
 5', mRNA sequence.

ACCESSION BQ706212

Db	198	CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCAGCAACTACAAC	257
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	258	CCGTCCCCTCAAGAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAACCAGTTCTCCCTG	317
Qy	310	AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAAT----	365
Db	318	AAGTTGAGTTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTACGAGGGGTATCGGG	377
Qy	366	-----TAATTGGTTCGACCCTTGGGGCCAGGGAACCCTG	399
Db	378	GCCATTCTTGGAGTCGTAAAGACCCCCGCACGGCCTGACTATTGGGGCCAGGGAGCCCTG	437
Qy	400	GTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC	459
Db	438	GTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCC	497
Qy	460	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA	519
Db	498	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA	557
Qy	520	CCGGT	524
Db	558	CCGGT	562

RESULT 6

LOCUS	BQ705980	974 bp	mRNA	linear	EST 16-JUL-2002
DEFINITION	AGENCOURT_8351717 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6282235 5', mRNA sequence.				

VERSION BQ705980.1 GI:21844879

SOURCE Homo sapiens (human)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

JOURNAL Unpublished (1999)

Email: cgapbs-r@mail.nih.gov

cDNA Library Preparation: Rubin Lab

DNA Sequencing by: Agencourt Bioscience Corporation

found through the I.M.A.G.E. Consortium/IJNL at:

Plate: LLCM2476 row: e column: 20

FEATURES	Location/Qualifiers
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/organism="Homo sapiens"
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6282235"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_113"
/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
EcoRI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the
laboratory of Gerald M. Rubin (University of California,
Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
Superscript II RT (Life Technologies). Note: this is a
NIH_MGC Library."

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ORIGIN

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Query Match          80.0%;  Score 419;  DB 5;  Length 974;
Best Local Similarity 88.1%;  Pred. No. 4e-107;
Matches 480;  Conservative 0;  Mismatches 35;  Indels 30;  Gaps 1;

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Db      30 AACATGAAACACCTGTGGTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCTGTCC 89

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      90 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 149

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     150 ACCTGCGCTGTCTATGGTGGGTCTTCAGTGATTACTACTGGACCTGGATCCGCCAGTCC 209

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC 249
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     210 CCAGGGAAGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCAGCAACTACAAC 269

Qy     250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
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Db     270 CCGTCCCTCAAGAGTCGAGTCACCATGTCTAGTAGACACGTCCAAGAACCAGTTCTCCCTG 329

Qy     310 AAAGTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAAT---- 365
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Db     330 AAGTTGAGTTCTGTGACCGCCCGGACACGGCTGTGTATTACTGTACGAGGGGTATCGGG 389

Qy     366 -----TAATTGGTTCGACCCTTGCGGCCAGGGAACCCTG 399
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Qy     400 GTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCC 459
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Db     450 GTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCC 509

Qy     460 AAGAGCACCTCTGGGGGACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 519
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     510 AAGAGCACCTCTGGGGGACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA 569

Qy     520 CCGGT 524
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Db 570 CCGGT 574 .

RESULT 7

BQ708110

LOCUS BQ708110 936 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8354095 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278615 5', mRNA sequence.

ACCESSION BQ708110

VERSION BQ708110.1 GI:21847009

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 936)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2466 row: n column: 24

High quality sequence stop: 552.

FEATURES

source Location/Qualifiers

1. .936

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6278615"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 79.7%; Score 417.6; DB 5; Length 936;

Best Local Similarity 87.8%; Pred. No. 9.7e-107;

Matches 481; Conservative 0; Mismatches 34; Indels 33; Gaps 1;

QY 10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Db 23 AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCAGATGGGTCCTGTCC 82

QY 70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129

DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLM2384 row: j column: 08
High quality sequence stop: 653.

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FEATURES             Location/Qualifiers
     source            1. .901
                        /organism="Homo sapiens"
                        /mol_type="mRNA"
                        /db_xref="taxon:9606"
                        /clone="IMAGE:6215527"
                        /lab_host="DH10B (phage-resistant)"
                        /clone_lib="NIH_MGC_113"
                        /note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
                        EcoRI; cDNA made by oligo-dT priming. Directionally cloned
                        into EcoRI/XhoI sites using the following 5' adaptor:
                        GGCACGAG(G). Library constructed by Ling Hong in the
                        laboratory of Gerald M. Rubin (University of California,
                        Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
                        Superscript II RT (Life Technologies). Note: this is a
                        NIH MGC Library."
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ORIGIN

Query Match 79.5%; Score 416.8; DB 5; Length 901;
Best Local Similarity 88.2%; Pred. No. 1.6e-106;
Matches 473; Conservative 0; Mismatches 42; Indels 21; Gaps 1;

Qy	10	ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCCTGTCT	69
Db	21	AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCCTGTCC	80
Qy	70	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	129
Db	81	CAGATGCACCTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC	140
Qy	130	ACCTGCGCTGTCTATGGTG GTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA	189
Db	141	ACCTGCGGTGTCTCTGGTG GGTTCCTTCAGTGGTTACTACTGGAGCTGGGTCCGCCAGTCC	200
Qy	190	CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC	249
Db	201	CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAACCACCGACTACAAC	260
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	261	CCGTCCCTCAAGAGTCGAGTCACCATATCAGTCGACGCTCCAAAAGCAATTCTCCCTG	320
Qy	310	AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAA-	368
		+	
Db	321	ATGCTGACGTCTGTGACCGCCGCGGACACGGGTGTCTATTATTGTGGGAGACTTATTTAC	380
Qy	369	- - - - - TTGGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCCACCGTC	408
Db	381	GCACTTTGGAGAGCCCCGATCCGCGTTTCGACCCTTGGGGCCAGGGAACCCTGGTCCACCGTC	440
Qy	409	TCCTCAGCCTCAACCAAGGGCCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACC	468

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Db      441 TCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCTCTCCAAGAGCACC 500
Qy      469 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
Db      501 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 556

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RESULT 9

BQ710311

LOCUS BQ710311 922 bp mRNA linear EST 16-JUL-2002
 DEFINITION AGENCOURT_8418290 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6281411
 5', mRNA sequence.

ACCESSION BQ710311

VERSION BQ710311.1 GI:21849210

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 922)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2474 row: c column: 12

High quality sequence stop: 713.

FEATURES

source

Location/Qualifiers

1..922

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6281411"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."

ORIGIN

Query Match 79.5%; Score 416.8; DB 5; Length 922;

Best Local Similarity 88.2%; Pred. No. 1.6e-106;

Matches 473; Conservative 0; Mismatches 42; Indels 21; Gaps 1;

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LCM2521 row: h column: 15
 High quality sequence stop: 523.

FEATURES	Location/Qualifiers
source	1. .943 /organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606" /clone="IMAGE:6303038" /lab_host="DH10B (phage-resistant)" /clone_lib="NIH_MGC_113" /note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 79.5%; Score 416.8; DB 5; Length 943;
 Best Local Similarity 88.2%; Pred. No. 1.6e-106;
 Matches 473; Conservative 0; Mismatches 42; Indels 21; Gaps 1;

Qy	10	ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT	69
Db	21	AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC	80
Qy	70	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCTGTCCCTC	129
Db	81	CAGATGCACCTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCTGTCCCTC	140
Qy	130	ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA	189
Db	141	ACCTGCGGTGTCTCTGGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGGTCGCCAGTCC	200
Qy	190	CCAGGTAAGGGTCTGGAGTGGATTGGTGAATCAATCATAGTGAAGCACCAACTACAAC	249
Db	201	CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAACCACCGACTACAAC	260
Qy	250	CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG	309
Db	261	CCGTCCCTCAAGAGTCGAGTCACCATATCAGTCGACGCGTCCAAAAAGCAATTCTCCCTG	320
Qy	310	AAACTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAA-	368
Db	321	ATGCTGACGTCTGTGACCGCCGCGGACACGGGTGTCTATTATTGTGGGAGACTTATTTAC	380
Qy	369	-----TTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTC	408
Db	381	GCACTTTGGAGAGCCCGATCCGCGTTCGACCACTGGGGCCAGGGAACCCTGGTCACCGTC	440

Qy 409 TCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACC 468
 |||
 Db 441 TCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACC 500
 Qy 469 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
 |||
 Db 501 TCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 556

RESULT 11

BQ707968

LOCUS BQ707968 796 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8347274 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6279293
 5', mRNA sequence.

ACCESSION BQ707968

VERSION BQ707968.1 GI:21846880

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 796)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2468 row: k column: 06

High quality sequence stop: 552.

FEATURES

source

Location/Qualifiers

1..796

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6279293"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."

ORIGIN

Query Match 79.3%; Score 415.4; DB 5; Length 796;
 Best Local Similarity 88.4%; Pred. No. 3.9e-106;
 Matches 471; Conservative 0; Mismatches 41; Indels 21; Gaps 1;

Qy	13	ATGAAACACCTGTGGTTCCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCCTGTCTCAG	72
Db	23	ATGAAACACCTGTGGTTCCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCCTGTCCCAG	82
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	83	ATGCACCTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	142
Qy	133	TGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	143	TGCGGTGTCTCTGGTGGGTCCCTTCAGTGGTTACTACTGGAGCTGGGTCCGCCAGTCCCCA	202
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG	252
Db	203	GGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAACCACCGACTACAACCCG	262
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	263	TCCCTCAAGAGTCGAGTCACCATATCAGTCGACGCGTCCAAAAGCAATTCTCCCTGATG	322
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAA----	368
Db	323	CTGACGTCTGTGACCGCCGCGGACACGGGTGTCTATTATTGTGGGAGACTTATTTACGCA	382
Qy	369	-----TTGGTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCC	411
Db	383	CTTTGGAGAGCCCGATCCGCGTTCGACCACTGGGGCCAGGGAACCCCTGGTCACCGTCTCC	442
Qy	412	TCAGCCTCAACCAAGGGGCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT	471
Db	443	TCAGCCTCCACCAAGGGGCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCT	502
Qy	472	GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	503	GGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	555

RESULT 12

B0882187

LOCUS	B0882187	971 bp	mRNA	linear	EST 16-AUG-2002
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DEFINITION AGENCOURT_8493980 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6302549
5', mRNA sequence.

ACCESSION B0882187

VERSION BQ882187.1 GI:22274195

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 971)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson


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Db      408 TCGATTGTTGGCGTGATGAAAGCCGTCGGGCGCGGAAGGGGGTTCGACCCCTGGGGCCAG 467
Qy      391 GGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCA 450
        |||
Db      468 GGAACCCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCA 527
Qy      451 CCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTAC 510
        |||
Db      528 CCCTCCTCCAAGAGCACCTCTGGGGGCACAGCAGCCCTGGGCTGCCTGGTCAAGGACTAC 587
Qy      511 TTCCCCGAACCGGT 524
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Db      588 TTCCCCGAACCGGT 601

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RESULT 13

BQ712107

LOCUS BQ712107 1001 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8354049 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6278301 5', mRNA sequence.

ACCESSION BQ712107

VERSION BQ712107.1 GI:21851006

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1001)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2466 row: a column: 22

High quality sequence stop: 495.

FEATURES

source

Location/Qualifiers

1. .1001

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="IMAGE:6278301"

/lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_113"

/note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a

NIH_MGC Library."

ORIGIN

Query Match 77.4%; Score 405.8; DB 5; Length 1001;
Best Local Similarity 88.1%; Pred. No. 2.1e-103;
Matches 473; Conservative 0; Mismatches 42; Indels 22; Gaps 2;

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Qy      10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCT 69
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Db      21 AACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCC 80

Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      81 CAGATGCACCTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 140

Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCA 189
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     141 ACCTGCGGTGTCTCTGGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGGTCCGCCAGTCC 200

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAAC 249
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     201 CCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAACCACCGACTACAAC 260

Qy     250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     261 CCGTCCCTCAAGAGTCGAGTCACCATATCAGTCGACGCGTCCAAAAAGCAATTCTCCCTG 320

Qy     310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGAGTAATTAA- 368
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     321 ATGCTGACGTCTGTGACCGCCGCGGACACGGGTGTCTATTATTGTGGGAGACTTATTTAC 380

Qy     369 -----TTGGTTCGACCCTTGGGGCCAGGGAACCCTGGTCACCGTC 408
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     381 GCACTTTGGAGAGCCCGATCCGCGTTCGACCACTGGGGCCAGGGAACCCTGGTCACCGTC 440

Qy     409 TCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACC 468
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     441 TCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACC 500

Qy     469 TCTGGGGGCACAGC-GGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 524
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     501 TCTGGGGGCACAGCGGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT 557

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RESULT 14

BQ711708

LOCUS BQ711708 911 bp mRNA linear EST 16-JUL-2002

DEFINITION AGENCOURT_8475090 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6301572
5', mRNA sequence.

ACCESSION BQ711708

VERSION BQ711708.1 GI:21850607

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 911)

AUTHORS	NIH-MGC http://mgc.nci.nih.gov/ .
TITLE	National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL	Unpublished (1999)
COMMENT	Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: Dr. Mark Watson cDNA Library Preparation: Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLCM2517 row: k column: 13 High quality sequence stop: 630.

ORIGIN

Qy	13	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCCTGTCTCAG	72
Db	17	ATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCCAGATGGGTCCTGTCCCAG	76
Qy	73	GTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACC	132
Db	77	GTGCAGCTGCAGGAGTCGGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACC	136
Qy	133	TGCGCTGTCTATGGTGGTTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCACCA	192
Db	137	TGCACTGTCTCTGGTGGCTCCACCAGTAGTTACTACTGGAGCTGGATCCGGCAGCCCGCC	196
Qy	193	GGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGGAAGCACCAACTACAACCCG	252
Db	197	GGGAAGGGACTGGAGTGGATTGGACGTATCTATACCAGTGGGAGCACCAGCTACAACCCC	256
Qy	253	TCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAA	312
Db	257	TCCCTCAAGAGTCGAGTCAACATGTCAATTGACACGTCCAAGAAACAGTTCTCCCTGAAG	316
Qy	313	CTGAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAG---AGTAATTAAT	369

Db	317	CTGACCTCTGTGACCGCCGCGGACACGGCCGTATATTATTGTGCGCGTTCGTCGTCCGGT	376
Qy	370	TGGTTTCGACCCTTGGGGCCAGGGAACCCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGC	429
Db	377	TGGTTTGTACTACTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCAGCCTCCACCAAGGGC	436
Qy	430	CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG	489
Db	437	CCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTG	496
Qy	490	GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	524
Db	497	GGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGT	531

RESULT 15

BQ709996

LOCUS	BQ709996	912 bp	mRNA	linear	EST 16-JUL-2002
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DEFINITION AGENCOURT_8474918 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6301657 5', mRNA sequence.

ACCESSION BQ709996

VERSION BQ709996.1 GI:21848895

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 912)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Mark Watson

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLCM2517 row: 0 column: 02

High quality sequence stop: 579.

FEATURES

source

Location/Qualifiers

1. .912

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/organism="Homo sapiens"
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/mol type="mRNA"
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/db xref="taxon:9606"
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/clone="IMAGE:6301657"
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/lab host="DH10B (phage-resistant)"
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/clone lib="NIH MGC 113"
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/note="Organ: spleen; Vector: pOTB7; Site 1: XhoI; Site 2:
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EcoRI; cDNA made by oligo-dT priming. Directionally cloned

into EcoRI/XhoI sites using the following 5' adaptor:

GGCACGAG(G). Library constructed by Ling Hong in the

laboratory of Gerald M. Rubin (University of California,

Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and

Superscript II RT (Life Technologies). Note: this is a
NIH_MGC Library."

ORIGIN

Query Match 77.1%; Score 403.8; DB 5; Length 912;
Best Local Similarity 85.8%; Pred. No. 7.7e-103;
Matches 478; Conservative 0; Mismatches 37; Indels 42; Gaps 1;

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Qy      10 ACCATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCTAGATGGGTCTCTGTCT 69
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Qy      70 CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC 129
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Qy     130 ACCTGCGCTGTCTATGGTGGTTCCTTCAGTGTTACTACTGGAGCTGGATCCGCCAGCCA 189
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Db     141 ACCTGCGCTGTCTATGGTGGGTCCCTTCAGTGTTGCTACTGGACCTGGATCCGCCAGTCC 200

Qy     190 CCAGGTAAGGGTCTGGAGTGGATTGGTGAAATCAATCATAGTGAAGCACCAACTACAAC 249
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Qy     250 CCGTCTCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTG 309
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Qy     310 AAAGTGAAGCTCTGTGACCGCTGCGGACACGGCTGTGTATTACTGTGCGAGA----- 360
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Qy     361 -----GTAATTAATTGGTTCGACCCTTGCGGC 387
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Qy     388 CAGGGAACCCTGGTCACCGTCTCCTCAGCCTCAACCAAGGGCCCATCGGTCTTCCCCCTG 447
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Search completed: December 2, 2004, 20:56:37
Job time : 2730.54 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:02 ; Search time 2246.9 Seconds
(without alignments)
8839.572 Million cell updates/sec

Title: US-08-728-463B-220
Perfect score: 420
Sequence: 1 AAGCTTGCCACCATGATGGT.....TGGCTGCACCATCTGTCTTC 420

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4526729 seqs, 23644849745 residues

Total number of hits satisfying chosen parameters: 9053458

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: gb_htg:*
3: gb_in:*
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13: gb_un:*
14: gb_vi:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		%					
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1	420	100.0	420	6	AR161429	AR161429 Sequence	
2	420	100.0	420	6	AR369974	AR369974 Sequence	
3	420	100.0	420	6	BD096608	BD096608 Transgeni	

4	420	100.0	3819	6	AR161402	AR161402 Sequence
5	420	100.0	3819	6	AR369997	AR369997 Sequence
6	420	100.0	3819	6	BD096631	BD096631 Transgeni
7	373.8	89.0	824	9	AY510107	AY510107 Homo sapi
8	373.8	89.0	936	9	BC073764	BC073764 Homo sapi
9	370.6	88.2	974	6	AX305000	AX305000 Sequence
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18	362.6	86.3	716	6	AX327727	AX327727 Sequence
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28	338.6	80.6	979	9	BC073763	BC073763 Homo sapi
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31	335.4	79.9	429	9	HUMIGKW	M74019 Homo sapien
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42	329	78.3	817	6	BD248702	BD248702 Immunoglo
43	326.6	77.8	430	9	AF417853	AF417853 Homo sapi
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ALIGNMENTS

RESULT 1

AR161429

LOCUS AR161429 420 bp DNA linear PAT 17-OCT-2001

DEFINITION Sequence 420 from patent US 6255458.

ACCESSION AR161429

VERSION AR161429.1 GI:16227307

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 420)
AUTHORS Lonberg,N. and Kay,R.M.
TITLE High affinity human antibodies and human antibodies against digoxin
JOURNAL Patent: US 6255458-A 420 03-JUL-2001;
FEATURES Location/Qualifiers
source 1. .420
/organism="unknown"
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ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 420;
Best Local Similarity 100.0%; Pred. No. 3.3e-129;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60
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Db      1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60

Qy     61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
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Qy    241 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300
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RESULT 2

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LOCUS AR369974 420 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 220 from patent US 6300129.
ACCESSION AR369974
VERSION AR369974.1 GI:34606414
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 420)
AUTHORS Lonberg,N. and Kay,R.M.
TITLE Transgenic non-human animals for producing heterologous antibodies
JOURNAL Patent: US 6300129-A 220 09-OCT-2001;

FEATURES Location/Qualifiers
 source 1. .420
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 420;
Best Local Similarity 100.0%; Pred. No. 3.3e-129;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          61  GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA  120
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RESULT 3

BD096608

LOCUS BD096608 420 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous
 antibodies.

ACCESSION BD096608

VERSION BD096608.1 GI:22642196

KEYWORDS JP 2001527386-A/135.

SOURCE unidentified

 ORGANISM unidentified
 unclassified.

REFERENCE 1 (bases 1 to 420)

 AUTHORS Lonberg,N. and Kay,R.M.

 TITLE Transgenic non-human animals capable of producing heterologous
 antibodies

 JOURNAL Patent: JP 2001527386-A 135 25-DEC-2001;

 GENPHARM INTERNATIONAL

COMMENT OS Unidentified

DEFINITION Sequence 393 from patent US 6255458.
 ACCESSION AR161402
 VERSION AR161402.1 GI:16227274
 KEYWORDS .
 SOURCE Unknown.
 ORGANISM Unknown.
 Unclassified.
 REFERENCE 1 (bases 1 to 3819)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE High affinity human antibodies and human antibodies against digoxin
 JOURNAL Patent: US 6255458-A 393 03-JUL-2001;
 FEATURES Location/Qualifiers
 source 1. .3819
 /organism="unknown"
 /mol_type="unassigned DNA"
 ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 3819;
 Best Local Similarity 100.0%; Pred. No. 3.6e-129;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      2794 ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 2853
  
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RESULT 5

AR369997

LOCUS AR369997 3819 bp DNA linear PAT 12-SEP-2003

DEFINITION Sequence 243 from patent US 6300129.

ACCESSION AR369997

VERSION AR369997.1 GI:34606437

KEYWORDS .

SOURCE Unknown.
 ORGANISM Unknown.
 Unclassified.
 REFERENCE 1 (bases 1 to 3819)
 AUTHORS Lonberg,N. and Kay,R.M.
 TITLE Transgenic non-human animals for producing heterologous antibodies
 JOURNAL Patent: US 6300129-A 243 09-OCT-2001;
 FEATURES Location/Qualifiers
 source 1. .3819
 /organism="unknown"
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ORIGIN

Query Match 100.0%; Score 420; DB 6; Length 3819;
 Best Local Similarity 100.0%; Pred. No. 3.6e-129;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60
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RESULT 6

BD096631

LOCUS BD096631 3819 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.

ACCESSION BD096631

VERSION BD096631.1 GI:22642219

KEYWORDS JP 2001527386-A/158.

SOURCE unidentified

ORGANISM unidentified

unclassified.

REFERENCE 1 (bases 1 to 3819)
AUTHORS Lonberg,N. and Kay,R.M.
TITLE Transgenic non-human animals capable of producing heterologous antibodies
JOURNAL Patent: JP 2001527386-A 158 25-DEC-2001;
GENPHARM INTERNATIONAL
COMMENT OS Unidentified
PN JP 2001527386-A/158
PD 25-DEC-2001
PF 01-DEC-1997 JP 1998525687
PR 02-DEC-1996 US 08/758417
PI NILS LONBERG,ROBERT M KAY
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CC Transgenic non-human animals capable of
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CC antibodies
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ORIGIN

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Best Local Similarity 100.0%; Pred. No. 3.6e-129;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 60
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Db 2434 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCA 2493
Qy 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
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Db 2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553
Qy 121 GACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
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Db 2674 GGTGTCCCATCAAGGTTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 2733
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Db 2734 AGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAATAGTTTCCCGTAC 2793
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